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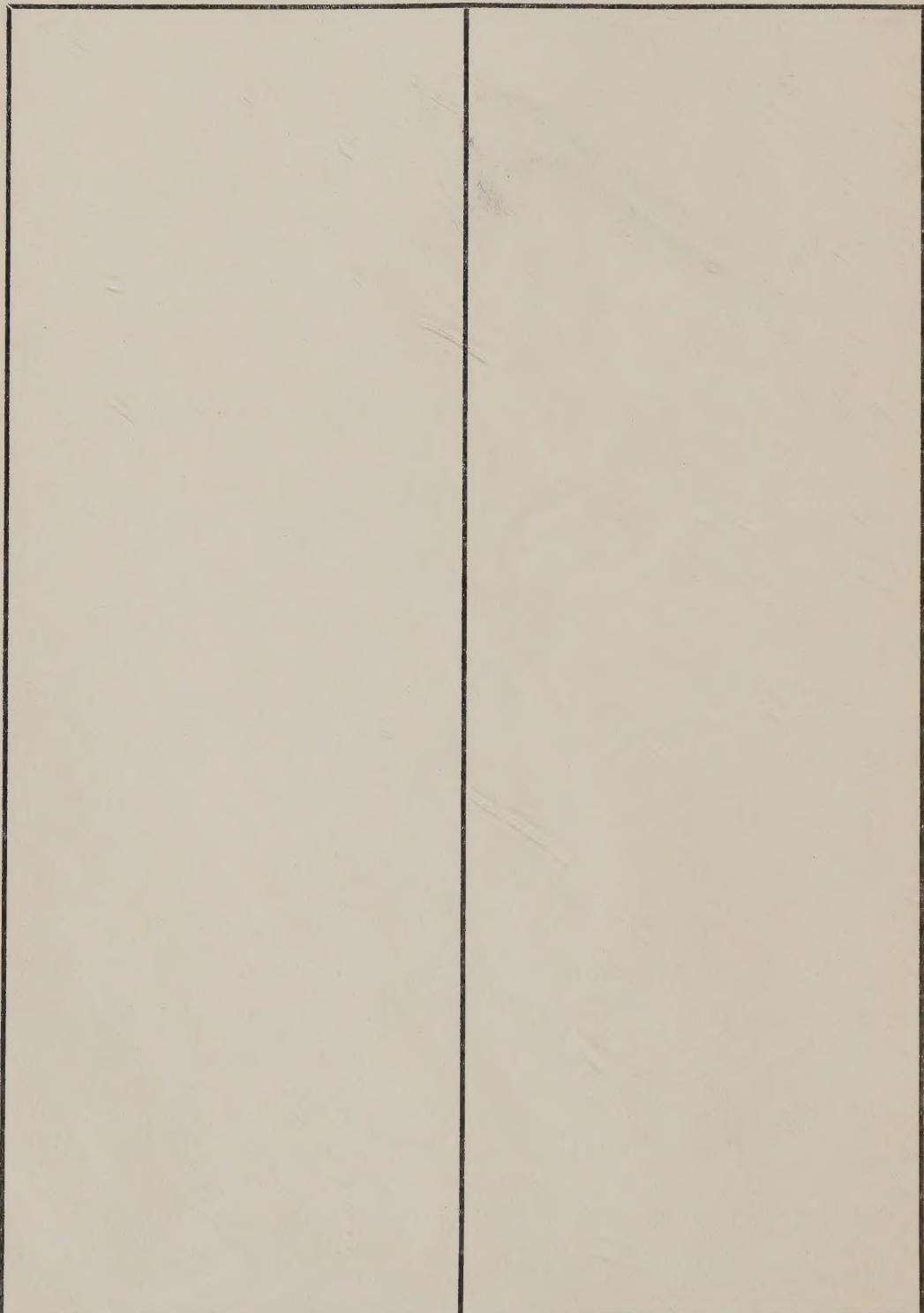
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PREFACE

This report presents a new series of N.H.S. prescribing statistics covering the years 1961 and 1962. Tables and commentary have been prepared by the Ministry's Statistics Branch from monthly sample analyses of N.H.S. prescription data for England and Wales and from corresponding data which the Branch processes for the Scottish Home and Health Department.

The report also includes the results of an investigation into the relationships between individual doctors' prescribing costs and their practice characteristics such as age of doctor and N.H.S. medical list size.

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CONTENTS

INTRODUCTION

	<i>Page</i>
Prescription Analysis—methodology and sources of information	1
Section 1 Prescription Analysis sample—England and Wales	1
Section 2 Prescription Analysis sample—Scotland	1
Section 3 Information on drug classification	2
Section 4 Routine and other analyses from Prescription Analysis sample data	2
Section 5 Other sources of prescribing information given in this publication	3

CHAPTER 1

Sample prescribing data—quarterly analyses by therapeutic group. Annual analyses by year of introduction	5
Section 1 Numbers and costs of prescriptions by therapeutic group	5
Section 2 Therapeutic group price and quantity indexes	6
Section 3 Numbers and costs of proprietary prescriptions—analyses by year of introduction	8
Section 4 Seasonal variation in total numbers and costs of prescriptions for individual therapeutic groups	8
Section 5 Summary	9

CHAPTER 2

Regional prescribing differences—England and Wales	10
Section 1 Prescribing averages—consistency over a four year period	10
Section 2 Comparison between actual and sample costs per prescription 1961	11
Section 3 Sample data—analysis by therapeutic groups	11
Section 4 Detailed analyses for regions with high and low costs per prescription	13
Section 5 Analyses by therapeutic sub-groups	13
Section 6 Analyses by proprietary drugs within therapeutic sub-groups	14
Section 7 Individual drugs—average quantities per prescription	14
Section 8 Summary and conclusions	15

CHAPTER 3

Variation in the prescribing averages for different groups of general practitioners	17
Section 1 Doctor sample	17
Section 2 Age of doctor	18
Section 3 Size of N.H.S. medical list	19
Section 4 Male and female doctors	20
Section 5 Inconclusive analyses	21
Section 6 Summary	21
Appendix 1 References	23
Appendix 2 Composition of regions by executive council areas	24
Appendix 3 Explanatory Notes	25
TABLE 1 Quarterly numbers of prescriptions by therapeutic group—England and Wales	26
TABLE 2 Quarterly totals of net ingredient cost of prescriptions by therapeutic group—England and Wales	28
TABLE 3 Quarterly averages of net ingredient cost per prescription by therapeutic group—England and Wales	30
TABLE 4 Quarterly therapeutic group percentages of prescriptions—England and Wales	32
TABLE 5 Quarterly therapeutic group percentages of net ingredient cost—England and Wales	34
TABLE 6 Quarterly therapeutic group indexes of seasonal variation in numbers of prescriptions—England and Wales	36
TABLE 7 Quarterly therapeutic group indexes of seasonal variation in net ingredient cost—England and Wales	37
TABLE 8 Quarterly numbers of prescriptions by therapeutic group—Scotland	38
TABLE 9 Quarterly totals of net ingredient cost of prescriptions by therapeutic group—Scotland	40
TABLE 10 Quarterly averages of net ingredient cost per prescription by therapeutic group—Scotland	42
TABLE 11 Quarterly therapeutic group percentages of prescriptions—Scotland	44
TABLE 12 Quarterly therapeutic group percentages of net ingredient cost—Scotland	46

	<i>Page</i>
TABLE 13 Quarterly therapeutic group indexes of seasonal variation in numbers of prescriptions—Scotland	48
TABLE 14 Quarterly therapeutic group indexes of seasonal variation in net ingredient cost—Scotland	48
TABLE 15 Quarterly therapeutic group indexes of quantity per prescription—England and Wales	50
TABLE 16 Quarterly therapeutic group indexes of price—England and Wales	52
TABLE 17 Quarterly therapeutic group indexes of total numbers of prescriptions—England and Wales	54
TABLE 18 Numbers and costs of ‘proprietary’ prescriptions by year of introduction—England and Wales	56
TABLE 19 Numbers and costs of ‘proprietary’ prescriptions by year of introduction—Scotland	56
TABLE 20 Regional prescribing averages for the years 1959–1962—England and Wales	57
TABLE 21 Regional prescribing averages for the years 1959–1962 ranked in descending order—England and Wales	58
TABLE 22 Actual and sample regional prescribing data for 1961—England and Wales	59
TABLE 23 Regional therapeutic group percentage distributions of prescriptions for 1961—England and Wales	60
TABLE 24 Regional therapeutic group averages of net ingredient cost for 1961—England and Wales	62
TABLE 25 Regional averages of net ingredient cost per prescription—England and Wales	64
TABLE 26 Prescribing data by therapeutic group and sub-group for high cost and low cost regions	65
TABLE 27 Prescribing data for ‘proprietary’ prescriptions by therapeutic group and sub-group for high cost and low cost regions	66
TABLE 28 Prescribing averages by age and practice category of prescribing doctor	67
TABLE 29 Prescribing averages by age of prescribing doctor and executive council cost category	67
TABLE 30 Prescribing averages by total N.H.S. Medical list size	68

INTRODUCTION

PRESCRIPTION ANALYSIS—METHODOLOGY AND SOURCES OF INFORMATION

1. Prescription Analysis sample. England and Wales.

At the beginning of 1961 the Ministry of Health revised the basis on which information is obtained about the kinds of drugs, dressings and appliances dispensed under the N.H.S. Pharmaceutical Services by chemist contractors (including drug stores) and appliance contractors. The information is obtained each month from every tenth prescription form ⁽¹⁾ submitted for pricing by a representative sample of one in twenty contractors (for this purpose each branch of a multiple firm is regarded as a separate contractor). Therefore, the sample comprises approximately one in two hundred of all prescriptions dispensed. The sample of contractors is changed as often as practicable so as to achieve a wide coverage and to maintain a representative sample.

With the co-operation of the Joint Pricing Committees for England and Wales, lists identifying the sample of contractors are sent to all pricing bureaux. Contractors send all prescriptions to these bureaux, usually at monthly intervals. After pricing has been completed the bureaux staff select for analysis every tenth prescription form from the bundles submitted by the sample contractors.

Information from each prescription is transcribed on to printed coding sheets. Where possible all details are given in a coded form suitable for direct transfer to punched cards. The details given for each prescription include the following:

- (i) identity of contractor, including location;
- (ii) identity of drug—throughout this publication the term drug refers to all items ordered on prescriptions whether drugs, dressings or appliances;
- (iii) quantity dispensed—in most cases this will be identical with the quantity ordered;
- (iv) net ingredient cost of drugs—the reimbursement to the contractor for the cost of ingredients.

At the Ministry of Health these details are transferred to punched cards. A separate card is punched for each prescription. Approximately 100,000 cards each month are included in the sample.

2. Prescription Analysis sample. Scotland.

From the beginning of July, 1961 the Ministry has operated a similar scheme covering Scotland on behalf of the Scottish Home and Health Department. The information has been obtained with the co-operation of the Drug Accounts Committee for Scotland. The scheme differs from that for England and Wales in the relative size of the sample. Data are obtained from one in ten prescription forms submitted for pricing by one in ten contractors instead of one in twenty contractors as in England and Wales. Therefore, the sample comprises approximately one per cent of all prescriptions dispensed.

(1) A separate prescription is written for each item ordered and there may be more than one prescription on a form.

3. Information on drug classification.

The Ministry of Health holds punched cards recording under the more important classifications, each drug dispensed under the Pharmaceutical Services (one card per drug). Each card contains the following information:

For all drugs

- (i) identity of drug;
- (ii) type of drug—non-proprietary, proprietary, dressing or appliance;
- (iii) therapeutic class—a classification grouping drugs which have similar therapeutic effects;
- (iv) medicament class—physical form—e.g. tablet, injection, ointment etc.

For proprietary drugs only

- (v) year of introduction;
- (vi) manufacturer;
- (vii) “Cohen classification”—a classification in broad terms indicating the therapeutic value of proprietary preparations as assessed by the Standing Joint Committee on the Classification of Proprietary Preparations (Central Health Services Council, 1959).

Information about 10,000 drugs is recorded in this way. The classification cards are associated with the punched cards, containing the sample prescription data, described in sections 1 and 2, so as to provide information about N.H.S. prescribing in terms of these classifications.

4. Routine and other analyses from Prescription Analysis sample data.

Each month's sample data are processed so that details are provided about the total numbers of prescriptions and the totals of net ingredient cost by:

- (i) type of drug;
- (ii) therapeutic group (for this purpose certain closely related therapeutic classifications are grouped together);
- (iii) medicament class.

Both numbers and costs of prescriptions are raised by a factor of approximately 200 for England and Wales and 100 for Scotland, so as to provide estimates of total prescribing in the various classes. The raising factor for any particular month is the ratio of the total number of prescriptions (all drugs) to the corresponding total number of sample prescriptions for the month. Raised monthly figures are aggregated so as to provide estimates of prescribing figures in the quarter and the year. Similarly, sample data are processed quarterly to provide information about total numbers of prescriptions and totals of net ingredient cost of preparations in each Cohen class. Annual summaries of these four analyses of prescribing in England and Wales are given in the Annual Reports of the Ministry of Health for 1961 and 1962 (Ministry of Health, 1962 and 1963). The sample data have also provided information about other general and special aspects of prescribing.

All of the tables discussed in chapter 1 and most of those discussed in chapter 2 are based on Prescription Analysis sample data.

5. Other sources of prescribing information given in this publication.

Information about the actual overall total numbers and costs of prescriptions dispensed in different areas can be obtained as a by product of the pricing of prescriptions. This source has provided information used for comparisons with sample data discussed in section 1 of chapter 1 and for the tables discussed in sections 1 and 2 of chapter 2.

For one month in each year for each executive council area the total number and cost of prescriptions ordered by each doctor are obtained as part of the general procedure for investigating the prescribing costs of all general practitioners. This source has provided the prescribing information for the tables discussed in chapter 3.

Chapter 1

SAMPLE PRESCRIBING DATA—QUARTERLY ANALYSES BY THERAPEUTIC GROUP. ANNUAL ANALYSES BY YEAR OF INTRODUCTION

1. Numbers and costs of prescriptions by therapeutic group.

Tables 1 and 2 show the estimated numbers of prescriptions and totals of net ingredient cost of prescriptions dispensed in England and Wales during each quarter of 1961 and 1962. Figures given in these two tables are shown in percentage form in tables 4 and 5. Table 3 shows the corresponding averages of net ingredient cost per prescription. Similar prescribing information for Scotland is given in tables 8–12. Scottish prescribing data are not available for the first two quarters of 1961 (see section 2 of the Introduction).

The overall total numbers of prescriptions are actual figures. All other figures are estimates obtained from the Prescription Analysis sample (see Introduction, section 4). The sample estimates of the total net ingredient costs of all prescriptions can be compared with actual figures obtained from pricing bureaux accounts. There is close agreement between these two sets of figures. The largest percentage deviation for England and Wales occurred in the last quarter of 1962 when the sample estimate and the actual cost differed by £110,000 or 0·7 per cent of the actual figure. For Scotland the percentage deviations between the sample estimates and the actual costs ranged up to 1·8 per cent. The larger percentage deviations for Scotland were expected because of the smaller total number of prescriptions in the Scottish sample.

The number of prescriptions dispensed in England and Wales during the first quarter of 1961 was high by comparison with the number dispensed in the first quarter of 1962. This arose partly as a consequence of the major influenza epidemic in the first quarter of 1961 and partly because the higher prescription charge introduced in March, 1961 had the effect of lowering all the total numbers of prescriptions dispensed in subsequent quarters. Apart from seasonal variation (discussed in section 4 of this chapter) the full two year information for England and Wales indicates other basic trends in the quarterly numbers and costs of prescriptions.

The overall total numbers of prescriptions for each of the last three quarters of 1962 are about the same as those for the corresponding quarters of 1961. Corresponding totals of net ingredient cost show differences of the order of £1 million in each quarter. One of the factors leading to increases in the total net ingredient cost of drugs is the tendency towards increases in the therapeutic group average costs per prescription (table 3). These increases are to be expected as newer and usually more expensive drugs gain in popularity at the expense of the older and usually cheaper drugs (discussed in section 3). Other factors affecting the average costs are changes in the average quantities dispensed per prescription and changes in price (discussed in section 2).

Another factor leading to increased costs is the change-over time in the percentage distributions of prescriptions for the different therapeutic groups.

By comparison with 1961, all the quarterly distributions for 1962 show tendencies towards higher percentage of prescriptions for some of the more expensive therapeutic groups, i.e. those with the higher average costs per prescription. This change was to be expected between the distributions for the first quarters of 1961 and 1962 because of the factors which affected prescribing in the first quarter of 1961 (the influenza epidemic and the lower prescription charge current for most of that quarter). The continuation of this trend during the remaining part of 1962 is an indication of more general changes in the pattern of prescribing. Correspondingly, there were decreases in the percentages of prescriptions for some of the less expensive therapeutic groups.

It can be seen in table 4 that the larger percentage increases during 1962 were for barbiturates (3d), anti-depressives (3j), tetracyclines (5b), and corticosteroids (11b). The larger percentage decreases were for non-barbiturate hypnotics (3e), expectorants and cough suppressants (7b), topical sedatives, antipruritics (11c) and individually formulated preparations, etc. (12).

Tables 10 and 11 indicate that generally similar trends apply to Scottish prescribing between the last two quarters of 1961 and 1962. Caution is necessary when interpreting the Scottish data for some therapeutic groups because of the small numbers of sample prescriptions on which the information is based.

2. Therapeutic group indexes of price and quantity per prescription.

Sample data for England and Wales have been used to obtain for about 1,200 of the more frequently prescribed drugs, quarterly estimates of the numbers of prescriptions, total quantities dispensed and the total net ingredient costs per prescription. The selected drugs accounted for approximately 85 per cent of the total net ingredient cost of all drugs dispensed in 1961 and for approximately 80 per cent of the total net ingredient cost of all drugs dispensed in 1962. Drugs introduced since the beginning of 1961 were excluded.

Quarterly therapeutic group indexes of quantity per prescription and net ingredient cost per unit quantity (price) have been calculated from these data. The indexes, which are available as yet only for the first and last quarters of 1961 and 1962, are given in tables 15 and 16. Each figure shown in these tables is related to a base of 100 for the year 1961 as a whole. The separate therapeutic group indexes were calculated by weighting the corresponding indexes for individual drugs by their net ingredient costs during the base year. Therefore, the quarterly therapeutic group indexes of quantity per prescription are estimates of the increases or decreases in the therapeutic group total net ingredient cost for 1961 as a whole if the quantities per prescription for the relevant quarter had applied throughout 1961. Similarly the price indexes are estimates of the changes in the therapeutic group net ingredient costs for 1961 if the prices for the quarter had applied throughout 1961.

The therapeutic group indexes have been weighted by their total net ingredient costs (all drugs) for 1961 so as to provide 'All groups' overall indexes of the quarterly changes in quantity per prescription and price.

As general indicators of how the therapeutic group net ingredient costs for 1961 are affected by changes in price and quantity per prescription the two indexes are limited to some extent by:

- (i) sampling error;
- (ii) the exclusion of the newest drugs and those infrequently prescribed;

(iii) the irregular influence of drugs which are subject to extreme seasonal prescribing—in general, drugs which were heavily prescribed in some quarters but not at all in others have been included for quarters in which they were prescribed, but the group vaccines and sera has been excluded entirely because of the extreme seasonal prescribing of dominant drugs in the group.

If the separate indexes are regarded as no more than indicators of the direction of changes in quantity per prescription and price and as approximate rather than precise estimates of the extent of the changes, the limitations of the data become less significant.

For purposes of comparison with tables 15 and 16, an index of quarterly changes in the total number of prescriptions in each therapeutic group is given in table 17. This index is also related to a base of 100 for the average quarterly number of prescriptions in each therapeutic group during 1961 as a whole. The all groups index is the corresponding measure of change in the total number of prescriptions dispensed.

It can be seen from table 15 that the indexes of quantity per prescription are much higher in the first quarter of 1962 than in the first quarter of 1961. For most therapeutic groups the higher indexes of quantity per prescription in the first quarter of 1962 are more than offset by lower indexes of the number of prescriptions. Comparisons between the fourth quarters of 1961 and 1962 show a continued trend towards higher quantities per prescription for most therapeutic groups. Table 17 shows that this trend is not offset generally by lower numbers of prescriptions in the fourth quarter of 1962. About the same overall numbers of prescriptions were dispensed in both quarters. The individual therapeutic group indexes of the number of prescriptions are higher in the last quarter of 1962 for some groups and lower for others. These individual group changes are more likely to be associated with the changing popularity of individual drugs, in as much as this affected the frequency of prescribing for the groups as a whole, rather than with changing quantities per prescription. The fairly general trend towards higher quantities per prescription suggests that doctors are tending to prescribe for longer periods than formerly. At least part of this change in doctors' prescribing habits probably results from the prescribing of larger quantities at any one time for chronic sick patients, following the higher prescription charge.

Table 16 shows that prices for established drugs tend to fall or to remain fairly stable. There are few price increases. Slight variations up or down between quarters may have arisen through seasonal purchasing habits for those drugs where price is dependent on the quantity purchased.

When the corresponding therapeutic group indexes of quantity per prescription, price and number of prescriptions are multiplied together, the combined therapeutic group index represents the aggregate effect of these factors on the total net ingredient cost for the group. This combined index is an incomplete measure of change in the therapeutic group total net ingredient costs between the base year and the quarter because it rests on the same percentage distribution of prescriptions for individual drugs within the group as in the base year. It does not measure, therefore, the effect on the total net ingredient costs of changes within the group in the relative frequency of prescribing of individual drugs, e.g., the effect on costs of the relative increases in the popularity of the more expensive drugs.

3. Numbers of drugs, prescriptions and costs of 'proprietary drugs', by year of introduction.

Table 18 shows the estimated numbers of proprietary drugs dispensed in England and Wales during 1961 and 1962, together with corresponding total numbers of prescriptions and their net ingredient costs. Averages of net ingredient cost per prescription are also shown. Corresponding information about the proprietary drugs dispensed in Scotland during 1962 is given in table 19.

The footnotes explain that the tables refer only to drugs prescribed by proprietary name and that no account is taken of differences in the years of introduction for particular strengths of a drug.

Table 18 shows a sharp decline in the prescribing during 1962, of drugs introduced before 1956. The number of these drugs prescribed during 1962 was 300 less than the number prescribed during 1961. The corresponding number of prescriptions fell by more than 5 million. Numbers of prescriptions for drugs introduced between 1956 and 1958 tended to decline. The sharper decline in the number of prescriptions for drugs introduced in 1958 can most likely be partly explained by the withdrawal at the end of 1961 of drugs containing thalidomide. There were striking increases in the prescribing during 1962 of drugs introduced in 1960 or later.

The increased popularity of the newer drugs and the corresponding popularity decline of the older drugs is a major factor in the rising overall total net ingredient cost of drugs. Table 18 shows that the average cost per prescription for the newer proprietary drugs is about twice that for drugs introduced before 1956.

The importance of this factor is further emphasized by the prescribing data for England and Wales given in the annual reports of the Ministry of Health for 1961 and 1962 (Ministry of Health, 1962 and 1963). These data show a decline during 1962 in the numbers of prescriptions for the very cheap non-proprietary drugs.

In addition to providing an obvious explanation of the rising therapeutic group average costs per prescription, the increased popularity of the newer drugs provides at least a partial explanation of the changes in the therapeutic group percentage distributions of prescriptions (discussed in section 1).

Table 18 shows that the average costs per prescription for each year of introduction were higher in 1962 than in 1961. This change is probably explained by the tendency towards higher quantities per prescription in 1962, offset to some extent only, by lower prices (see section 2).

Table 19 shows that the Scottish prescribing data for 1962 exhibit a distribution of prescriptions by year of introduction similar to that for England and Wales. The range of drugs sampled was smaller. The most striking differences between the two sets of data are the lower average costs per prescription in Scotland for drugs introduced in 1957, 1959 and 1960.

4. Indexes of seasonal variation in numbers and totals of net ingredient cost of prescriptions for individual therapeutic groups.

Some indications of the amount of seasonal—or, more precisely, quarterly periodic—variation in numbers and totals of net ingredient cost are given in

tables 6 and 7 for England and Wales and tables 13 and 14 for Scotland. These tables refer to prescribing in 1962 only, because of the special factors operating in the first quarter of 1961 which distorted the seasonal pattern, and because Scottish prescribing data were not available for the first half of 1961.

For groups in which there was no apparent upward or downward general trend in the quarterly figures the index was obtained as

$$100 \times \left\{ \frac{\text{quarterly number (or cost) of prescriptions}}{\text{one quarter of the corresponding annual figure}} \right\}$$

Where the existence of an underlying trend would have seriously biased an index obtained in this way the denominator was replaced by the expected trend value, thus correcting the index for the trend effect. The trend values were calculated from data for 1962 and the last three quarters of 1961 (England and Wales) and from the data for all six quarters (Scotland).

Where the four quarterly indexes for any one group are near to 100 the seasonal variation is small. Where there is heavy seasonal prescribing for the group the index is greater than 100 and where seasonal factors operate against prescribing in the group the index is less than 100. This information is available for one year only and is subject to sampling error. The figures shown in tables 6, 7, 13 and 14 are confined, therefore, to those groups where the estimated numbers of prescriptions dispensed in each quarter are more than 200,000 in England and Wales and more than 100,000 in Scotland. Furthermore, the figures are shown only for those groups in which the index indicates considerable seasonal variation, i.e., the index for any one quarter is less than 90 or greater than 110.

Seasonal variation in net ingredient cost is in some cases a reflection of seasonal variation in numbers of prescriptions. In as much as the two indexes, number and cost, differ they reflect the influences of seasonal variations in average quantity per prescription, kinds of drugs ordered, and of price where this varies with chemists' seasonal purchasing habits. More reliable seasonal indexes should emerge as subsequent quarterly data become available.

5. Summary.

- (i) Since March 1961, corresponding quarterly total numbers of prescriptions remained at about the same level, but total net ingredient costs increased by about £1 million between corresponding quarters (section 1).
- (ii) In most therapeutic groups the average net ingredient cost per prescription has risen, and there has also been an increase in the proportionate use of the more expensive of the therapeutic groups (section 1).
- (iii) Of these two factors the first is brought about partly by a trend towards higher quantities per prescription offset to some extent by reduced prices (section 2) and both factors are affected by the increased popularity of newer and more expensive drugs (section 3).
- (iv) Indexes of seasonal variability in the numbers of prescriptions and of net ingredient costs of prescriptions in the various therapeutic groups are discussed (section 4).

Chapter 2

REGIONAL PRESCRIBING DIFFERENCES—ENGLAND AND WALES

1. Consistency over a four year period.

Information about the total number of N.H.S. prescriptions dispensed in an executive council area and the corresponding total net ingredient cost of prescriptions is available from returns made by pricing bureaux. Information about the total number of persons on doctors' N.H.S. prescribing lists, i.e., persons for whom they may prescribe, is obtained from the executive council.

For the years 1959–1962 these totals have been summarized so as to provide corresponding totals for each of the ten standard regions of England and Wales. (For lists of executive councils included in a particular region see Appendix 2). From these totals have been calculated the three prescribing averages:

- (i) net ingredient cost per prescription—cost per prescription;
- (ii) number of prescriptions per person on doctors' prescribing lists—prescription frequency;
- (iii) net ingredient cost per person on doctors' prescribing lists—cost per person.

Details are given in table 20. The consistency over time of the regional order of these averages can be seen in table 21 where the averages are ranked in descending order, i.e. the figure 1 indicates the highest average and the figure 10 the lowest. Most regions show the same or nearly the same order over the four year period for each of the three averages.

There does not seem to be any consistency between regions in their rankings by cost per prescription and prescription frequency. Wales has high rankings for both and the Midland region has low rankings for both. Some other regions have high rankings for one and low rankings for the other.

The third average, cost per person, is the product of the other two.

The averages given in table 20 illustrate, generally, differences between regions in N.H.S. prescribing by general practitioners. The figures are based on prescriptions dispensed in an area, which may differ from those prescribed in the area since prescriptions prescribed in one area may be dispensed in another. For areas as large as standard regions the net effect of such transfers between regions is likely to be small and has been neglected in the following discussion.

About one per cent of all prescriptions dispensed by chemist and appliance contractors are not prescribed by general practitioners for their prescribing patients. These include prescriptions for some expensive drugs which a general practitioner may order for patients for whom he normally dispenses drugs and prescriptions ordered by doctors in hospital clinics lacking out-patient dispensing facilities. Both these groups of prescriptions have high costs per prescription and their exclusion would reduce the national average by about one penny. All prescribing averages discussed in this chapter are slightly inflated, therefore, by the inclusion of these groups of prescriptions. In as much as they

are disproportionately distributed between regions they affect comparisons between the regional averages, but all available information suggests that their inclusion is not a major factor in the explanation of differences between these averages.

Because of the factors discussed in the preceding two paragraphs the "dispensing basis" prescribing averages for individual executive council areas are not such reliable indicators of prescribing in these areas. Nevertheless analyses of data for executive council areas between 1950 and 1960 indicated that the prescribing averages for different areas tended to maintain the same rankings, although there was a tendency during the period for extreme averages to become less marked. The prescribing averages for regions differ less than those for executive council areas because extreme averages for the latter are absorbed in the averages for the larger regional areas. The consistency of the regional rankings given in table 21 indicates that grouping by regions brings together areas which to some extent have similar prescribing averages and that prescribing is at least partly influenced therefore by factors which tend to affect the region as a whole.

2. Comparisons between actual and sample costs per prescription—1961.

Table 22 shows actual numbers of prescriptions and costs per prescription in 1961 for each of the ten regions and the corresponding estimates of costs per prescription based on the prescription analysis sample of one in 200 prescriptions (see Introduction for details).

The All regions actual and sample costs per prescription differ by only 0·1 pence. Corresponding regional averages differ by amounts ranging from 0·3 pence for London and the South East region where the largest number of prescriptions was dispensed, to 2·2 pence for the Southern region, where the smallest number of prescriptions was dispensed. Actual regional differences in costs per prescription reach a maximum of 11·2 pence between Wales and the Midland region. Some of the differences between the actual regional averages are much greater than the largest difference between the corresponding regional actual and sample averages. It may be concluded therefore that the sample data can be reliably used for further investigation of the factors which gave rise to large regional differences in costs per prescription.

3. Sample data—analysis by therapeutic group.

In tables 23 and 24 the sample data are analysed by therapeutic group. In these and all other tables discussed in this chapter the regions are arranged in descending order of overall sample regional costs per prescription. Table 23 shows the percentage distributions of prescriptions and table 24 the averages of cost per prescription.

There does not seem to be any systematic relationship between the therapeutic group percentage distributions of prescriptions for regions with widely differing overall costs per prescription, as might be expected if differing regional costs were wholly associated with regional differences in morbidity. On the other hand table 24 shows marked evidence of an association between the therapeutic group costs per prescription and the corresponding overall averages. This association becomes evident as the table is read from left to right i.e., from regions with high overall average costs to regions with low overall average costs. Comparisons between Wales and the Midland region show that Wales has higher costs per prescription in 29 out of 33 groups. In one of the four remaining

groups the averages are equal and of the three other groups one is for dressings and appliances. Comparisons between the Northern and the East and West Riding regions show that the Northern region has the higher averages in 24 out of 33 groups. Taking all regions together Wales has the highest averages in 14 groups which for England and Wales as a whole account for approximately 50 per cent of the total number and net ingredient cost of all prescriptions dispensed during 1961. The Midland region has the lowest averages in 16 groups which account for approximately 75 per cent of the total number and 65 per cent of the total net ingredient cost of all prescriptions dispensed. In 9 of these groups which account for approximately 40 per cent of the total number and net ingredient cost of all prescriptions dispensed, Wales has the highest and the Midland region the lowest averages.

In table 25 the relative effects of regional differences in the therapeutic group percentage distributions of prescriptions and costs per prescription are shown. The sample overall regional costs per prescription are given in the column on the left. The middle column contains estimated overall averages based on a standard percentage distribution and the column on the right contains estimated overall averages based on a standard set of therapeutic group costs per prescription. In both cases the standards used are those for England and Wales as a whole.

Any one overall regional cost per prescription can be obtained as: (therapeutic group cost per prescription multiplied by the proportion of prescriptions for that group) summed over all therapeutic groups.

Example—the sample overall cost per prescription for Wales can be obtained from the columns for Wales in tables 23 and 24 as follows:

$$\frac{5.0 \times 51 + 1.8 \times 28 \dots \text{and so on to} \dots 4.3 \times 80}{100} = 72$$

The standardized averages are obtained by keeping one of the two components standard for all regions.

Example—the average for Wales, standardized for the therapeutic group percentage distribution of prescriptions is shown in the middle column of table 25. This figure is obtained from the All regions column of table 23 and the Wales column of table 24 as follows:

$$\frac{5.2 \times 51 + 1.7 \times 28 \dots \text{and so on to} \dots 3.5 \times 80}{100} = 71$$

Example—the average for Wales, standardized for the therapeutic group costs per prescription is shown in the right hand column of table 25. This figure is obtained from the Wales column of table 23 and the All regions column of table 24 as follows:

$$\frac{5.0 \times 42 + 1.8 \times 23 \dots \text{and so on to} \dots 4.3 \times 89}{100} = 66$$

The range of figures in the middle column of table 25 is nearly as large as that in the column on the left. This implies that regional differences in the percentage distributions are relatively unimportant factors, generally, in the explanation of overall regional differences in costs per prescription. By contrast, the range of figures in the column on the right is very small by comparison with that in the

left hand column. This implies that regional differences in therapeutic group costs per prescription are major factors in the explanation of regional differences in the overall averages. In the Northern region the percentage distribution of prescriptions appears also to have contributed to the high overall regional cost per prescription.

By definition, the therapeutic groups are intended to bring together drugs with similar therapeutic effects, i.e., drugs which treat broadly similar kinds of illnesses. Regional differences in therapeutic costs per prescription imply, therefore, regional differences in the kinds of drugs prescribed for broadly similar illnesses and/or differences in the quantities ordered per prescription.

4. Detailed analyses for regions with high and low costs per prescription.

Sample data from the two high cost regions (Wales and the Northern region) and the two low cost regions (East and West Ridings and the Midland regions) have been analysed in greater detail. This was to find whether different kinds of drugs, different quantities per prescription or both, have contributed to the more important differences in therapeutic group costs per prescription between these regions. These analyses were confined to six of the thirty three groups shown in tables 23 and 24.

The following groups were analysed:

- Group 3 (b)* Sedatives, hypnotics, anticonvulsants, tranquillizers, and preparations for treating motion sickness and Parkinsonism.
- Group 4 (b)* Diuretics.
- Group 5 (a)* Antibiotics (acting systemically on infections).
- Group 6 (b)* Erythropoietic preparations including vitamin B12.
- Group 7 (b)* Bronchodilators, bronchorelaxants, expectorants, cough suppressants, and respiratory stimulants.
- Group 11 (b)* Corticosteroids (acting on the skin).

The selected groups are those for which regional differences in the therapeutic group costs per prescription have most effect on differences in the overall regional costs per prescription. They account for over 40 per cent of all prescriptions dispensed in England and Wales during 1961 by chemist and appliance contractors and for nearly 50 per cent of the total net ingredient cost of all prescriptions dispensed.

5. Analyses by therapeutic sub-groups.

Four of the six therapeutic groups can be sub-divided into therapeutic sub-groups. The remaining two groups (4 (b) and 11 (b)) are more homogeneous and therefore cannot be sub-divided in this manner.

In table 26 the prescriptions for each of the six groups are analysed by the percentage of prescriptions and cost per prescription for each therapeutic sub-group. It will be seen that generally one or both of the two high cost regions show higher percentages of prescriptions for the sub-groups with the higher costs per prescription. Thus for group 5(a), Wales and the Northern region show higher percentages of prescriptions than the other two regions for relatively expensive tetracyclines and lower percentages for relatively cheap penicillins. A similar position is evident for group 7(b) and to a lesser extent for

groups 3(b) and 6(b), the other groups where division into therapeutic sub-groups is possible. Some of these percentage differences are small and some individual cases might easily be explained by sampling error, but the general tendency over all the groups is more conclusive.

It is also evident from the costs per prescription given for each sub-group that the two high cost regions show higher costs per prescription for most of the therapeutic sub-groups. Out of a total of 15 cases including the two homogeneous groups, Wales or the Northern region show the highest average in 13 cases. (Wales shows the highest average in 8 cases). The Midland region shows the lowest average in 11 cases. Thus the association between the overall regional costs per prescription and those for individual therapeutic groups, discussed in section 3 of this chapter, seems to hold good when some of these groups are divided into their component sub-groups.

6. Analyses by proprietary drugs within therapeutic sub-groups.

In table 27 the percentages of prescriptions for proprietary drugs are given for each of the major therapeutic sub-groups, together with corresponding costs per prescription for these groups of 'proprietary' prescriptions.

It is evident that higher percentages of 'proprietary' prescriptions for nearly all the groups were ordered by doctors in the high cost regions. As in table 26 it may be concluded that the major interest is in the consistency of this trend rather than in the figures for any one group. It is especially interesting to note the consistency of the trend for the tetracycline group. This is a group in which all drugs are available only in proprietary form even though they may be prescribed by non-proprietary name. In this case the percentage differences in table 27 indicate possibly, a greater preference for the use of the proprietary names in the two high cost regions. Whilst such a preference if any might be confined to those groups where the non-proprietary name would necessarily result in the dispensing of a proprietary drug, it might also be a more general explanation of the higher percentages of 'proprietary' prescriptions in the high cost regions.

From the right half of the table it can be seen that the two high cost regions continue to show higher costs per prescription for most groups and sub-groups. Thus the trend shown by the figures in the right half of table 26 is present in table 27 although the latter table is concerned with smaller ranges of drugs because of the exclusion of non-proprietary drugs and others prescribed by non-proprietary names. Tables 26 and 27 show that the high cost regions differ from the low cost regions in the relative frequencies of prescriptions for drugs in certain sub-groups and in the relative frequencies of prescriptions for proprietary drugs. Table 27 also shows that despite the elimination of these factors the high cost regions show higher costs per prescription for most groups and sub-groups. This must be due to differences in the relative frequencies of the kinds of proprietary drugs prescribed in most groups and sub-groups and/or differences in the quantities ordered.

7. Individual drugs.

Regional differences in the average quantities ordered per prescription were investigated by a regional analysis of costs per prescription for 120 leading ⁽¹⁾

⁽¹⁾ Leading drugs—those with the largest sample totals of net ingredient cost in the 4 regions, i.e. those on which most money was spent.

drugs from the six therapeutic groups listed in section 4. Drugs from all the major sub-groups were included. For this investigation the average net ingredient cost per prescription was assumed to be directly proportional to the average quantity ordered per prescription.

The averages for each drug were ranked in descending order of cost per prescription. If there were no general tendency for one region to differ from another in average quantities ordered per prescription it would be expected that each region would be represented by about 25 per cent of the top ranks, 25 per cent of the second ranks and so on. In fact the Midland region showed 48 per cent of the bottom ranks as against 8 per cent of the top ranks. This region was also somewhat under-represented in the second ranks and over-represented in the third ranks. These divergences from expectation were extremely significant and indicated that quantities ordered per prescription were generally low for these six groups as a whole, by comparison with those for the other three regions. The tendency for low quantities per prescription in the Midland region was evident in some degree for each of the six therapeutic groups.

Separate analyses of the data from the 120 drugs did not suggest any significant overall trends in the order of regional quantities per prescription for the other three regions (two high cost and one low cost), although the other low cost region, East and West Ridings, had low quantities per prescription for groups 5(a) and 11(b) and high quantities per prescription for group 3(b).

8. Summary and conclusions.

- (i) Differences between regions in the three prescribing averages cost per person, prescription frequency and cost per prescription have been fairly consistent over time (section 1).
- (ii) Prescription analysis sample data were used to investigate regional differences in costs per prescription for 1961. It was found that regions with high overall costs per prescription tended to have high costs per prescription for many therapeutic groups. This implied differences between regions in the kinds of drugs ordered and/or in the quantities ordered per prescription (section 3).
- (iii) Sample data were further analysed for two high cost and two low cost regions (section 4).
- (iv) Higher percentages of prescriptions for drugs in the more expensive therapeutic sub-groups were shown by the two high cost regions (section 5).
- (v) Higher percentages of 'proprietary' prescriptions for the major therapeutic sub-groups were shown by the two high cost regions (section 6).
- (vi) For the relatively homogeneous groups of proprietary drugs within therapeutic sub-groups, costs per prescription remained higher in the two high cost regions (section 6).
- (vii) Quantities ordered per prescription were found to be low in the Midland region but no significant trend was established for the other three regions (section 7).

It can be concluded from the above summary that a major factor associated with different therapeutic costs per prescription for the high and low cost

regions is to be found in the different kinds of drugs prescribed for similar therapeutic treatments. However, part of the difference can be found in smaller average quantities prescribed in the Midland region.

In the absence of information about the diagnoses which gave rise to the prescribing in these four regions, the conclusions discussed above cannot be further investigated. However, since the conclusions about regional differences in net ingredient cost per prescription hold good over seemingly unrelated therapeutic groups and sub-groups there is some support for the inference that these differences are partly associated with factors other than morbidity. Morbidity factors might well partly explain these differences since the therapeutic groups and sub-groups are too widely drawn to distinguish between different illnesses, between mild and severe cases of the same kinds of illness, and between short term and chronic sickness. The suggestion given here is that morbidity is unlikely to be the only reason.

Comparisons have been made between the regional ranking orders of cost per prescription and prescription frequency (see table 21) on the one hand and general morbidity indicators on the other, e.g., the locally adjusted death rates given in The Registrar General's Statistical Review of England and Wales for 1960 (General Register Office, 1962) and the rates of sickness spells per 1,000 males at risk from data given in the Digest of Statistics Analysing Certificates of Incapacity for the years 1955/56 and 1957/58 (Ministry of Pensions and National Insurance, 1958 and 1961).

The regional ranking orders for death rates (1960), rates of sickness spells for influenza and bronchitis (1957/58), and for all causes (1955/56) were more closely associated with the regional ranking order for prescription frequency than with that for cost per prescription. This accords with the general expectation that these kinds of differences are more likely to result in regional differences in the frequency of prescribing rather than in cost per prescription.

The age/sex distributions of the home population at June, 1961 did not exhibit any obvious factors which were confined to both high cost regions or to both low cost regions. Contributory factors to regional differences in costs per prescription might possibly be found if regional variations were established in the following:

- (a) the participation in the regional health problems of the Hospital Service including consultant advice;
- (b) relevant doctors' practice characteristics (see also Chapter 3);
- (c) local customs including patient demands, and self medication;
- (d) the influence on doctors' prescribing of medical and prescribing literature including drug manufacturers' advertisements.

Chapter 3

VARIATION IN THE PRESCRIBING AVERAGES FOR DIFFERENT GROUPS OF GENERAL PRACTITIONERS.

1. Doctor sample⁽¹⁾

Certain information is available for one month in each year about the prescribing of an individual doctor for persons living in each of the executive council areas served by the doctor. This information comprises the total number and cost⁽²⁾ of prescriptions issued by each doctor, and the number of persons on the doctor's N.H.S. prescribing list. These data enable the three averages cost per person, cost per prescription, and prescription frequency (number of prescriptions per person) to be calculated for individual doctors or groups of doctors.

Approximately 53 per cent of all doctors in England and Wales were in contract with more than one executive council in July, 1959. It follows that prescribing data for any one executive council area may well not cover the complete practice of about half the doctors whose prescribing figures are analysed⁽³⁾. The month in which the detailed examination of doctors' prescribing is undertaken varies from year to year and from area to area. The areas examined in a particular month, however, are grouped geographically. So if a doctor's prescribing for part of his practice is examined in a particular month it is likely, although not certain, that his prescribing for the rest of his practice will be examined then also. For most doctors therefore one can obtain prescribing data for the whole of the practice for a particular month.

The three averages described above have been analysed for a sample of 3,150 doctors. This information covers prescribing between September, 1958 and July, 1959. For some month in this period the prescribing of doctors in every executive council area in the country was examined. From the list of all 138 executive council areas a sample was selected systematically, a greater chance of selection being accorded to areas where large numbers of doctors had the bulk of their practice. Twenty-nine areas were chosen. The method of selecting these areas ensured that they covered the range of variation of all areas as regards counties and county boroughs, expenditure on medicine, month of investigation and geographical location. The sample of doctors consisted of those doctors whose primary contract was with the chosen executive council (this implied in most cases that the bulk of their practices lay in that executive council area). The greater probability of selecting areas where large numbers of doctors had their practices was counterbalanced by selecting only a proportion of the doctors from those areas. Thus all doctors in England and Wales ultimately had about the same chance of being included in the sample.

(1) In this chapter the word 'doctor' is used for general medical practitioner.

(2) Costs comprise total payments to chemists. These are greater than the total net ingredient costs discussed in chapters 1 and 2.

(3) From 1st April, 1963 the prescribing statistics for an individual doctor cover the entire practice whether or not this is situated in more than one executive council area.

For each of the doctors in the sample, information was collected about the number and cost of prescriptions issued and about the total number of persons on the doctor's National Health Service prescribing list. The data included prescribing information from all councils with which the doctor was in contract, so that information about the complete practice could be assembled and compared. In many cases this involved no more than the whole of a doctor's prescribing in a particular month but sometimes the information about his prescribing in an adjacent area was not available for the same month as for the bulk of the practice. In these cases the aggregation of a doctor's prescribing data so as to provide complete information about the practice as a whole may have involved some element of seasonal variation in the aggregated figures; but this additional variation in a small part of the doctor's practice was assumed to be unimportant compared with the advantage of having complete practice information. In any event, it is impossible to avoid the effects of seasonal variation when comparing prescribing figures from different practices for which the prescribing investigations were held in some month between September, 1958 and July, 1959. These effects would be most marked for comparisons between areas; the data therefore have not been used in establishing areal differences. There is no reason to suppose that seasonal effects have significantly influenced any conclusions drawn from these data about different groups of doctors.

The Ministry of Health has certain information about the practice characteristics of any doctor providing medical services under the National Health Service. Information about the doctor's age, the overall N.H.S. practice size, whether a full or restricted range of medical services is provided, and whether the doctor has any assistants, has been linked with the prescribing information obtained from the doctor sample.

Since the averages, cost per prescription and prescription frequency, do not appear to be associated for individual doctors, they have, in general, been examined separately.

2. Age of doctor.

The sample doctors are grouped in table 28 according to age. For single-handed doctors, the three prescribing averages, cost per person, cost per prescription and prescription frequency, are given for each age group. For doctors in partnerships, figures of cost per prescription only are given for individual age groups. A preliminary analysis of the data supported the assumption that prescription frequency and cost per person are unreliable when related to the individual lists of partnership doctors since partnership doctors tend to prescribe for patients on their partners' lists. It is necessary therefore to look at prescribing averages per person for partnerships as a whole.

For both prescription frequency and cost per prescription the table shows that partnership doctors have about the same overall averages as single-handed doctors.

For single-handed doctors the table shows marked variation in the prescribing averages for different age groups. The difference in costs per person between the youngest and oldest age groups is about one shilling. Both cost per prescription and prescription frequency contribute to these differences in costs per person for different age groups. It may be that variation by age of doctor in the averages per person (but not per prescription) is partly affected by the possible association

between age of doctor and inflation of prescribing lists, e.g., if older doctors tend to have a greater degree of list inflation than younger doctors. However, there is no available information on this point.

For doctors in partnerships the trend towards lower costs per prescription is seen only for doctors aged 56 and over. It is possible that any trend towards lower costs per prescription with increasing age of partnership doctor is masked because of the factors connected with partnership practices, e.g., consultations between partners and prescribing for patients on other partners' lists.

The prescribing averages, by age of doctor, can be further analysed for each of the 29 executive council areas included in the sample. (Doctors are allocated to individual areas on the basis of their primary contract). When partnership doctors with their unreliable averages are excluded there are not enough sample single-handed doctors in some areas to give meaningful comparisons between age groups of doctors for those particular areas. The areas have been grouped therefore, into high, medium and low cost according to the areal average cost per person. Prescribing averages have been calculated for separate age groups of doctors for each group of areas. These averages are given in table 29. Cost per prescription and prescription frequency show a general but not completely regular decline with increasing age of doctor. Cost per person shows an almost completely regular decline with increasing age of doctor in each of the three groups of areas. The difference between the oldest and youngest doctors for each group is about the same as that between the oldest and youngest groups when all single-handed doctors in the sample are taken together. Cost per person of the youngest doctors in the group of low cost areas is about the same as that of the oldest doctors in the group of high cost areas. These comparisons point to a variation in prescribing costs associated with the age of the doctor, being superimposed upon an areal difference independently caused. The difference in cost per person of about fourpence a year for each year of age of a doctor, is small compared with the variation between areal averages. The weighted average ages of single-handed doctors in the 29 sample executive council areas varied by about 16 years (the average age for each area was calculated by weighting each doctor's age by the numbers of persons on his N.H.S. prescribing list). Differences between the weighted average ages imply differences between the areal costs per person of up to 64 pence in one year on account of age. In fact, the difference in areal prescribing costs between the highest and the lowest executive council areas was several times larger than this. This connection between a doctor's age and his prescribing costs accords with the findings of the Douglas Committee on prescribing costs in Scotland which showed that young doctors prescribe at a higher level than old doctors in the same area (Department of Health for Scotland, 1959).

3. Size of N.H.S. medical list.

Overall prescribing averages for 852 of the 1,023 single-handed doctors included in the sample are shown in table 30 according to the total number of persons on the doctor's N.H.S. medical list. (The total number on a doctor's list may be greater than the number on his N.H.S. prescribing list because the total list may include some persons for whom the doctor himself may dispense drugs)⁽¹⁾. Total list is used in this analysis as a measure of the total work in the

⁽¹⁾ Generally, persons living in rural areas more than a certain distance from a chemist's shop.

doctor's N.H.S. general practice. Information is shown only for single-handed doctors because prescribing data for individual doctors in partnership is not reliable when related to individual lists. Ninety-five single-handed doctors in the sample have been excluded because they employed qualified medical assistants and although the principal was responsible for his assistant's prescribing, the work load was shared. The analysis also excludes 76 single-handed doctors in the sample whose lists were open only to a limited number or group of persons, or who did not provide the full range of medical services.

In tables 28 and 29 it was shown that both prescription frequency and cost per prescription are lower for doctors in the older age groups. Table 30 shows that prescription frequency is higher for the smaller list size groups, but that costs per prescription are not associated significantly with list size. In this sample the older doctors tend to have the smaller lists but the weighted average ages of doctors in each list size group are fairly close, ranging from 48 years for doctors in the largest list size group to 56 years for doctors in the smallest list size group. Obviously the age differences between the list size groups do not contribute significantly to the prescription frequency differences between these groups. More detailed analyses of the data have shown that the age effect for both prescription frequency and cost per prescription is present for doctors within each list size group, although some of the trends tend to be blurred by small numbers of sample doctors within particular list size-age groups.

Martin (1957) found that list sizes were smaller in more prosperous areas: small list sizes and prosperity were associated with high costs per prescription but not with high prescription frequencies. In another analysis Dunlop, Inch and Paul (1953) found in 1951 in Scotland a high correlation between average list size in an area and the frequency of issuing prescription forms. This would make one expect low prescription frequencies for small list sizes. The analysis given in this publication is at odds with these two investigations.

The differences between these results and those quoted by Martin may be due in some measure to differences in approach. Martin considered only average list sizes for medium sized county borough executive council areas. The present analysis includes administrative county executive council areas.

4. Male and female doctors.

The prescribing averages in one month for male and for female doctors in the sample of 3,150 doctors are as follows:

	<i>Number of doctors</i>	<i>Average cost per person</i>	<i>Average cost per prescription</i>	<i>Average prescription frequency</i>
All	3,150	32.3	79.4	0.41
Male	2,889	32.0	79.4	0.40
Female	261	37.2	78.9	0.47

The separate figures for single-handed and partnership doctors are similar. The difference in costs per person between male and female doctors is due to a difference in prescription frequencies; costs per prescription are similar for both

groups of doctors. If this difference had been solely because women doctors were on average younger, one would have expected a difference in costs per prescription. A more likely explanation is that women doctors have a high proportion of women and children in their practices. There is some evidence that women patients have a higher consultation rate than do male patients. This has come out in studies by questionnaire of patients, such as the Survey of Sickness, carried out by the Central Office of Information 1943 to 1952 (Stocks, 1949; Logan and Brooke, 1957) and the more recent survey of a working class housing estate (Gray and Cartwright, 1954). Studies of general practitioners' records by the General Register Office have shown a higher consultation rate for women patients (Logan and Cushion, 1958). Both for single-handed and for partnership doctors these female doctors have N.H.S. prescribing lists on average about a third smaller than male doctors. The greater frequency of prescribing by female doctors may be connected with smaller average lists, but is not completely accounted for by this factor.

5. Inconclusive analyses.

These sample data have been examined in various other ways to test certain hypotheses as follows:

- (i) a comparison has been made between the prescribing averages of doctors who themselves dispense drugs and the prescribing averages of doctors who do not;
- (ii) the prescribing of doctors in each age group who began their careers before and after certain dates has been compared to see whether new arrivals in high or low cost areas prescribed at different levels from other doctors in those areas;
- (iii) the influence on doctors' prescribing of their medical schools (in as far as these can be ascertained from the Medical Register and Medical Directory) has also been investigated.

None of these analyses revealed any significant differences.

6. Summary.

- (i) The sources and limitations of available information about the prescribing of individual doctors were discussed (section 1).
- (ii) Both prescription frequency and cost per prescription were lower for older doctors than for younger doctors (section 2).
- (iii) Prescription frequency was lower for doctors with larger lists (section 3).
- (iv) Prescription frequency was higher for female doctors (section 4).
- (v) No significant variation in prescribing characteristics could be established in relation to self-dispensing, period of practice in the area, or medical school of doctor (section 5).

APPENDIX 1

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REGIONAL MAP ENGLAND and WALES



APPENDIX 2

Prescription Analysis—England and Wales

Key to Regions

Northern	Eastern	North Western
Carlisle	Bedfordshire	Barrow-in-Furness
Cumberland	Cambridgeshire	Birkenhead
Darlington	Essex	Blackburn
Durham	Great Yarmouth	Blackpool
Gateshead	Hertfordshire	Bolton
Middlesbrough	Huntingdonshire	Bootle
Newcastle-upon-Tyne	Ipswich	Burnley
Northumberland	Isle of Ely	Bury
South Shields	Norfolk	Cheshire
Sunderland	Norwich	Chester
Tynemouth	Southend-on-Sea	Lancashire
West Hartlepool	Suffolk, East	Liverpool
Westmorland	Suffolk, West	Manchester
Yorks. N. Riding		Oldham
		Preston
East and West Ridings	Wales	Rochdale
Barnsley	Anglesey	St. Helens
Bradford	Brecon	Salford
Dewsbury	Caernarvon	Southport
Doncaster	Cardiff	Stockport
Halifax	Cardigan	Wallasey
Huddersfield	Carmarthen	Warrington
Kingston-upon-Hull	Denbigh	Wigan
Leeds	Flint	
Rotherham	Glamorgan	Midland
Sheffield	Merioneth	Birmingham
Wakefield	Merthyr Tydfil	Burton-upon-Trent
York	Monmouth	Coventry
Yorks. E. Riding	Montgomery	Dudley
Yorks. W. Riding	Newport	Herefordshire
	Pembroke	Smethwick
London and South Eastern	Radnor	Shropshire
Brighton	Swansea	Staffordshire
Canterbury		Stoke-on-Trent
Croydon	Southern	Walsall
Eastbourne	Berkshire	Warwickshire
East Ham	Bournemouth	West Bromwich
Hastings	Buckinghamshire	Wolverhampton
Kent	Hampshire	Worcester
London	Isle of Wight	Worcestershire
Middlesex	Oxford	
Surrey	Oxfordshire	
Sussex East	Portsmouth	
Sussex West	Reading	
West Ham	Southampton	
North Midland	South Western	
Derby	Bath	
Derbyshire	Bristol	
Grimsby	Cornwall	
Leicester	Devon	
Leicestershire	Dorset	
Lincs.—Holland	Exeter	
Lincs.—Kesteven	Gloucester	
Lincs.—Lindsey	Gloucestershire	
Lincoln	Isle of Scilly	
Northampton	Plymouth	
Northamptonshire	Somerset	
Nottingham	Wiltshire	
Nottinghamshire		
Rutland		
Soke of Peterborough		

APPENDIX 3

Explanatory Notes

The following explanatory notes are relevant to tables based on Prescription Analysis data (see footnotes to the tables concerned). Additional footnotes to individual tables have been added where necessary.

- (1) With the exception of the overall total numbers of prescriptions, all data shown are estimated from samples of approximately 1 in 200 prescriptions dispensed in chemist and appliance contractors' establishments in England and Wales and approximately 1 in 100 prescriptions in Scotland. The overall total numbers of prescriptions are the actual totals dispensed in the periods concerned.
- (2) Figures may not add to the totals shown because of rounding.
- (3) – indicates that the measure for the item is less than half of the integral unit employed in the table, e.g., if numbers of prescriptions are shown to the nearest 10,000 the symbol “–” indicates less than 5,000.
- (4) N.A. indicates not available or not applicable.

Sample prescribing data: Numbers of prescriptions in each quarter: By therapeutic group

Table 1

		Therapeutic group				1961				1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter
All groups	63.41	47.94	43.96	49.71
1. Preparations acting on the alimentary system										1.85	1.55	1.52	1.57
(a) Antacids	0.71	0.54	0.55	0.60
(b) Gastro-intestinal sedatives	0.50	0.47	0.47	0.49
(c) Other preparations affecting digestive processes	1.37	0.78	0.62	0.66
(d) Tonics	1.26	1.05	1.02	1.04
(e) Laxatives and purgatives	0.24	0.21	0.23	0.23
(f) Preparations acting locally on the rectum	0.23	0.23	0.23	0.23
2. Preparations acting on the cardiovascular system										0.61	0.59	0.59	0.58
(a) Anti-hypertensives	0.61	0.59	0.59	0.58
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	2.04	1.69	1.70	1.86
3. Preparations acting on the nervous system										0.25	0.23	0.20	0.24
(a) Addictive analgesics	5.15	3.34	3.02	3.50
(b) Antipyretic analgesics	0.74	0.77	0.74	0.80
(c) Specific analgesics	4.11	3.71	3.67	3.72
(d) Barbiturates (unadmixed and if principal active ingredient)	0.96	0.83	0.82	0.82
(e) Non-barbiturate hypnotics	1.50	1.52	1.54	1.62
(f) Tranquillisers	0.25	0.25	0.27	0.26
(g) Anti-emetic preparations	0.44	0.43	0.47	0.48
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	1.57	1.57	1.52	1.51
(i) Stimulants and appetite suppressants	0.32	0.34	0.36	0.41
(j) Anti-depressives	1.46	1.46	1.08	1.00
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	1.05	1.00	1.05	1.05
4. Preparations acting on the genito-urinary system										0.60	0.59	0.59	0.58
(a) Sex hormones	0.94	0.90	0.91	0.84
(b) Diuretics	0.65	0.59	0.57	0.57
(c) All other preparations acting on the genito-urinary system

5. Preparations acting systemically on infections												
(a) Penicillins ...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Tetracyclines ...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Other antibiotics ...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Sulphonamides ...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Vaccines and sera ...	...	...	...	...	...	...	...	...	...	...	...	...
(f) Other anti-infective agents ...	...	...	...	...	...	...	...	...	...	...	...	...
6. Preparations affecting metabolism and nutrition												
(a) Insulin and other hypoglycaemics ...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Erythropoietic preparations including parenteral vitamin B12 ...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Vitamin preparations including multivitamin preparations with mineral salts ...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Corticosteroids for systemic treatment ...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition ...	...	...	...	...	...	...	...	...	...	...	...	...
7. Preparations acting on the respiratory system												
(a) Preparations acting locally on the upper respiratory tract ...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Expectorants and cough suppressants ...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Bronchodilators, relaxants and other preparations affecting the respiratory system ...	...	...	...	...	...	...	...	...	...	...	...	...
8. Preparations affecting allergic reactions												
9. Preparations acting on the ear	...	...	...	...	...	...	...	...	...	...	...	...
10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)	...	...	...	...	...	...	...	...	...	...	...	...
11. Topical preparations acting on the skin												
(a) Fungicides, parasiticides and other specific anti-ineffective agents ...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Corticosteroids ...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics ...	...	...	...	...	...	...	...	...	...	...	...	...
12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)	...	...	...	...	...	...	...	...	...	...	...	...
13. Dressings, appliances, trusses and hosiery	...	...	...	...	...	...	...	...	...	...	...	...

Sample prescribing data: Totals of net ingredient cost of prescriptions in each quarter: By therapeutic group

Table 2

	<i>Therapeutic group</i>	1961				1962				£ million
		1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	
All groups	15.69	13.13	12.46	14.15	16.06
1. Preparations acting on the alimentary system	0.24	0.22	0.21	0.23	0.24
(a) Antacids	0.05	0.04	0.05	0.04	0.05
(b) Gastro-intestinal sedatives	0.20	0.19	0.21	0.20	0.22
(c) Other preparations affecting digestive processes	0.13	0.13	0.13	0.13	0.13
(d) Tonics	0.14	0.13	0.14	0.13	0.14
(e) Laxatives and purgatives	0.07	0.06	0.07	0.08	0.08
(f) Preparations acting locally on the rectum	0.08
2. Preparations acting on the cardiovascular system	0.41	0.43	0.43	0.43	0.46
(a) Anti-hypertensives	0.39	0.36	0.38	0.44	0.44
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and and sclerosing agents	0.54
3. Preparations acting on the nervous system	0.04	0.04	0.03	0.03	0.04
(a) Addictive analgesics	0.59	0.50	0.45	0.52	0.60
(b) Antipyretic analgesics	0.36	0.38	0.39	0.40	0.42
(c) Specific analgesics	0.39	0.38	0.38	0.40	0.44
(d) Barbiturates (unadmixed and if principal active ingredient)	0.10	0.10	0.11	0.10	0.11
(e) Non-barbiturate hypnotics	0.54	0.58	0.61	0.66	0.70
(f) Tranquillisers	0.10	0.10	0.12	0.12	0.12
(g) Anti-emetic preparations	0.17	0.18	0.20	0.21	0.21
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	0.30	0.34	0.33	0.28	0.31
(i) Stimulants and appetite suppressants	0.29	0.31	0.34	0.41	0.42
(j) Anti-depressives	0.19	0.15	0.14	0.15	0.15
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	0.15
4. Preparations acting on the genito-urinary system	0.18	0.18	0.16	0.16	0.18
(a) Sex hormones	0.49	0.49	0.50	0.45	0.46
(b) Diuretics	0.11	0.11	0.11	0.11	0.10
(c) All other preparations acting on the genito-urinary system...	0.10

See footnotes in appendix 3.

Sample prescribing data: Averages of net ingredient cost per
prescription in each quarter: By therapeutic group

Table 3

	Therapeutic group	1961				1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter
All groups
1. Preparations acting on the alimentary system		59	66	68	68	69	72	74	74
(a) Antacids	31	33	35	37
(b) Gastro-intestinal sedatives	16	20	20	22
(c) Other preparations affecting digestive processes	95	98	101	110
(d) Tonics	22	24	23	24
(e) Laxatives and purgatives	28	30	31	31
(f) Preparations acting locally on the rectum	67	73	75	74
2. Preparations acting on the cardiovascular system		162	174	176	178	188	195	211	221
(a) Anti-hypertensives	51	53	57	58
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	46	51	58	60
3. Preparations acting on the nervous system		40	42	34	35	39	38	36	36
(a) Addictive analgesics	28	36	35	39
(b) Antipyretic analgesics	116	119	130	128
(c) Specific analgesics	23	24	25	26
(d) Barbiturates (unmixed and if principal active ingredient)	26	29	31	24
(e) Non-barbiturate hypnotics	87	92	95	99
(f) Tranquillisers	95	99	103	109
(g) Anti-emetic preparations	94	99	104	105
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	46	52	51	54
(i) Stimulants and appetite suppressants	215	226	237	227
(j) Anti-depressives	31	32	33	34
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	73	75	75	75
4. Preparations acting on the genito-urinary system		125	131	128	80
a) Sex hormones	42	46	45	79
b) Diuretics	133	134
c) All other preparations acting on the genito-urinary system	47	46

1 (a)
(b)
(c)
(d)
(e)
(f)
2 (a)
(b)
3 (a)
(b)
(c)
(d)
(e)
(f)
(g)
(h)
(i)
(j)
(k)
4 (a)
(b)
(c)

5.	Preparations acting systemically on infections	...	...	...	...	...	...	...	...	...	...	...
(a)	Pencillins	...	...	...	...	...	...	...	...	...	...	...
(b)	Tetracyclines	...	...	...	...	...	...	...	...	...	...	...
(c)	Other antibiotics	...	...	...	...	...	...	...	...	...	...	...
(d)	Sulphonamides	...	...	...	...	...	...	...	...	...	...	...
(e)	Vaccines and sera	...	...	...	...	...	...	...	...	...	...	...
(f)	Other anti-infective agents	...	...	...	...	...	...	...	...	...	...	...
6.	Preparations affecting metabolism and nutrition	...	...	...	...	...	...	...	...	...	...	...
(a)	Insulin and other hypoglycaemics	...	...	...	...	...	...	...	...	...	...	...
(b)	Erythropoietic preparations including parenteral vitamin B12	...	...	...	...	...	...	...	...	...	...	...
(c)	Vitamin preparations including multivitamin preparations with mineral salts	...	...	...	...	...	...	...	...	...	...	...
(d)	Corticosteroids for systemic treatment	...	...	...	...	...	...	...	...	...	...	...
(e)	Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition	...	...	...	...	...	...	...	...	...	...	...
7.	Preparations acting on the respiratory system	...	...	...	...	...	...	...	...	...	...	...
(a)	Preparations acting locally on the upper respiratory tract	...	...	...	...	...	...	...	...	...	...	...
(b)	Expectorants and cough suppressants	...	...	...	...	...	...	...	...	...	...	...
(c)	Bronchodilators, relaxants and other preparations affecting the respiratory system	...	...	...	...	...	...	...	...	...	...	...
8.	Preparations affecting allergic reactions	...	...	...	...	...	...	...	...	...	...	...
9.	Preparations acting on the ear	...	...	...	...	...	...	...	...	...	...	...
10.	Preparations acting on the eye (including anaesthetics and vasoconstrictors)	...	...	...	...	...	...	...	...	...	...	...
11.	Topical preparations acting on the skin	...	...	...	...	...	...	...	...	...	...	...
(a)	Fungicides, parasiticides and other specific anti-infective agents	...	...	...	...	...	...	...	...	...	...	...
(b)	Corticosteroids	...	...	...	...	...	...	...	...	...	...	...
(c)	Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics	...	...	...	...	...	...	...	...	...	...	...
12.	Other drugs and preparations (including individually formulated preparations not classified elsewhere)	...	...	...	...	...	...	...	...	...	...	...
13.	Dressings, appliances, trusses and hosiery	...	...	...	...	...	...	...	...	...	...	...

See footnotes in appendix 3.

Sample prescribing data: Percentages of prescriptions in each quarter: By therapeutic group

Table 4

	Therapeutic group						Per cent							
	1961		1962				1st quarter		2nd quarter		3rd quarter		4th quarter	
	1st quarter	2nd quarter	3rd quarter	4th quarter										
All groups	100.0	100.0	100.0	100.0	100.0	
1. Preparations acting on the alimentary system														
(a) Antacids	2.9	3.2	3.5	3.6	3.5	
(b) Gastro-intestinal sedatives	1.1	1.2	1.1	1.1	1.2	
(c) Other preparations affecting digestive processes	0.8	1.0	0.9	1.0	0.9	
(d) Tonics	2.2	1.6	1.4	1.4	1.2	
(e) Laxatives and purgatives	2.0	2.3	2.1	2.1	2.0	
(f) Preparations acting locally on the rectum	0.4	0.4	0.5	0.5	0.5	
2. Preparations acting on the cardiovascular system														
(a) Anti-hypertensives	1.0	1.2	1.3	1.4	1.3	
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	3.2	3.5	3.9	3.7	2 (a)	
3. Preparations acting on the nervous system														
(a) Addictive analgesics	0.4	0.5	0.5	0.4	0.5	
(b) Antipyretic analgesics	8.1	7.0	6.9	7.0	7.3	
(c) Specific analgesics	1.2	1.6	1.7	1.4	1.7	
(d) Barbiturates (unadmixed and if principal active ingredient)	6.5	7.7	8.4	7.5	7.8	
(e) Non-barbiturate hypnotics	1.5	1.7	1.9	1.5	1.3	
(f) Tranquillisers	2.4	3.2	3.5	3.3	3.3	
(g) Anti-emetic preparations	0.4	0.5	0.6	0.4	0.5	
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	0.7	0.9	1.1	0.9	1.0	
(i) Stimulants and appetite suppressants	2.5	3.3	3.4	2.6	2.4	
(j) Anti-depressives	0.5	0.7	0.8	0.8	1.1	
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	2.3	2.2	2.3	2.1	2.0	
4. Preparations acting on the genito-urinary system														
(a) Sex hormones	0.9	1.2	1.3	1.0	1.1	
(b) Diuretics	1.5	1.9	1.7	1.7	1.6	
(c) All other preparations acting on the genito-urinary system	1.0	1.2	1.3	1.0	1.1	

See footnotes in appendix 3.

Sample prescribing data: Percentages of net ingredient cost in each quarter: By therapeutic group

Table 5

	<i>Therapeutic group</i>	1961				1962				Per cent	
		1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter		
All groups	100.0	100.0
1. Preparations acting on the alimentary system	100.0	100.0
(a) Antacids	1.5	1.6
(b) Gastro-intestinal sedatives	0.3	0.4
(c) Other preparations affecting digestive processes	1.2	1.4
(d) Tonics	0.8	0.6
(e) Laxatives and purgatives	0.9	1.0
(f) Preparations acting locally on the rectum	0.4	0.5
2. Preparations acting on the cardiovascular system	2.6	3.3
(a) Anti-hypertensives	2.5	2.7
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	3.1	3.0
3. Preparations acting on the nervous system	0.3	0.2
(a) Addictive analgesics	3.8	3.6
(b) Antipyretic analgesics	2.3	2.9
(c) Specific analgesics	2.5	2.9
(d) Barbiturates (unadmixed and if principal active ingredient)	0.7	0.8
(e) Non-barbiturate hypnotics	3.4	4.4
(f) Tranquillisers	0.6	0.8
(g) Anti-emetic preparations	1.1	1.4
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	1.9	2.6
(i) Stimulants and appetite suppressants	1.8	2.4
(j) Anti-depressives	1.2	1.1
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	1.4	1.5
4. Preparations acting on the genito-urinary system	1.2	1.1
(a) Sex hormones	3.1	3.2
(b) Diuretics	0.9	0.7
(c) All other preparations acting on the genito-urinary system	0.7	0.7

England and Wales

Sample prescribing data: Indexes of quarterly variation in numbers of prescriptions: By therapeutic group

Table 6

Indexes

	<i>Therapeutic group</i>	1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter
1(d)	Tonics	131	98	83	88
3(i)	Stimulants and appetite suppressants ...	101	112	99	88
5(a)	Penicillins	125	91	77	107
5(b)	Tetracyclines	141	86	67	108
5(c)	Other antibiotics	121	93	80	104
5(d)	Sulphonamides	121	94	81	104
6(c)	Vitamin preparations, including multi-vitamin preparations with mineral salts	121	98	83	99
7(a)	Preparations acting locally on upper respiratory tract	131	102	71	97
7(b)	Expectorants and cough suppressants ...	159	75	51	115
8	Preparations affecting allergic reactions ...	95	120	97	87
9	Preparations acting on the ear	125	99	81	95
10	Preparations acting on the eye	104	112	94	91
12	Other drugs and preparations (including individually formulated preparations not classified elsewhere)	111	93	87	108

See footnotes in appendix 3.

Indexes less than 100 indicate that seasonal variation operated against prescribing in the group. Indexes greater than 100 indicate that seasonal factors operated in favour of prescribing in the group (see also section 2, chapter 1.)

England and Wales

**Sample prescribing data: Indexes of quarterly variation
in net ingredient cost: By therapeutic group**

Table 7

Indexes

	<i>Therapeutic group</i>	1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter
1(b)	Gastro-intestinal sedatives	98	98	87	117
1(d)	Tonics	126	98	86	90
3(k)	Local anaesthetics, analgesics, counter irritants and miscellaneous	109	102	89	100
5(a)	Penicillins	121	93	78	108
5(b)	Tetracyclines	147	85	64	106
5(c)	Other antibiotics	120	90	81	107
5(d)	Sulphonamides	116	97	84	103
6(c)	Vitamin preparations, including multi-vitamin preparations with mineral salts	117	95	84	104
7(a)	Preparations acting locally on the upper respiratory tract	126	104	74	97
7(b)	Expectorants and cough suppressants ...	153	77	53	118
8	Preparations affecting allergic reactions ...	91	126	99	85
9	Preparations acting on the ear	124	97	81	98
10	Preparations acting on the eye	98	114	94	94
12	Other drugs and preparations (including individually formulated preparations not classified elsewhere)	107	98	88	106

See footnotes to table 6.

Sample prescribing data: Numbers of prescriptions in
each quarter: By therapeutic group

Table 8

Thousands

	Therapeutic group	1961		1962		4th quarter
		3rd quarter	4th quarter	1st quarter	2nd quarter	
All groups	...	...	...	...	...
1. Preparations acting on the alimentary system	...	...	...	...	...
(a) Antacids	...	...	...	...	...	1 (a)
(b) Gastro-intestinal sedatives	...	...	...	...	...	(b)
(c) Other preparations affecting digestive processes	...	...	...	...	...	(c)
(d) Tonics	...	...	...	...	...	(d)
(e) Laxatives and purgatives	...	...	...	...	...	(e)
(f) Preparations acting locally on the rectum	...	...	...	...	...	(f)
38						
2. Preparations acting on the cardiovascular system	...	...	...	...	...	2 (a)
(a) Anti-hypertensives	...	...	...	...	...	(b)
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anti-coagulants and sclerosing agents	...	...	...	...	...
181	181	208	205	202	185	
3. Preparations acting on the nervous system	...	...	...	...	...	3 (a)
(a) Addictive analgesics	...	...	...	...	...	(b)
(b) Antipyretic analgesics	...	...	...	...	...	(c)
(c) Specific analgesics	...	...	...	...	...	(d)
(d) Barbiturates (unadmixed and if principal active ingredient)	...	...	...	...	...	(e)
(e) Non-barbiturate hypnotics	...	...	...	...	...	(f)
(f) Tranquillisers	...	...	...	...	...	(g)
(g) Anti-emetic preparations	...	...	...	...	...	(h)
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	...	...	...	...	...	(i)
(i) Stimulants and appetite suppressants	...	...	...	...	...	(j)
(j) Anti-depressives	...	...	...	...	...	(k)
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous...	...	...	...	...	...
38	44	44	50	50	43	
	145	138	148	172	140	
	27	31	33	36	38	
	75	82	91	83	87	

4. Preparations acting on the genito-urinary system

- (a) Sex hormones
- (b) Diuretics
- (c) All other preparations acting on the genito-urinary system... ...

5. Preparations acting systemically on infections

- (a) Penicillins
- (b) Tetracyclines
- (c) Other antibiotics
- (d) Sulphonamides
- (e) Vaccines and sera
- (f) Other anti-infective agents

6. Preparations affecting metabolism and nutrition

- (a) Insulin and other hypoglycaemics
- (b) Erythropoietic preparations including parenteral vitamin B12
- (c) Vitamin preparations including multivitamin preparations with mineral salts
- (d) Corticosteroids for systemic treatment
- (e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition

7. Preparations acting on the respiratory system

- (a) Preparations acting locally on the upper respiratory tract
- (b) Expectorants and cough suppressants
- (c) Bronchodilators, relaxants and other preparations affecting the respiratory system

8. Preparations affecting allergic reactions

9. Preparations acting on the ear

- 10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)** ...
- 113

11. Topical preparations acting on the skin

- (a) Fungicides, parasiticides and other specific anti-infective agents
- (b) Corticosteroids
- (c) Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics... ...

- 12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)** ...
- 220
- 261
- 302
- 179
- 153
- 162

- 13. Dressings, appliances, trusses and hosiery** ...
- 175
- 156
- 159
- 175
- 153
- 154

4 (a)	56
(b)	79
(c)	37
55	64
60	76
104	44
39	43

4 (a)	56
(b)	84
(c)	34
61	64
102	89
37	44

4 (a)	56
(b)	186
(c)	68
(d)	187
(e)	10
(f)	49

5 (a)	317
(b)	113
(c)	49
(d)	145
(e)	11
(f)	48

6 (a)	38
(b)	195
(c)	129
(d)	39
(e)	50

6 (a)	37
(b)	220
(c)	104
(d)	37
(e)	49

12	232
13	154

See footnotes in appendix 3.

**Sample prescribing data: Totals of net ingredient cost of
prescription in each quarter: By therapeutic group**

Table 9

Therapeutic group	1961				1962				£ thousand
	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1,655	1,655	
All groups	1,666	1,536	1,428	1,655	
1. Preparations acting on the alimentary system	1,309	1,504	1,536	1,655	
(a) Antacids	23	26	27	31	1 (a)
(b) Gastro-intestinal sedatives	4	3	5	7	(b)
(c) Other preparations affecting digestive processes	20	23	25	25	(c)
(d) Tonics	5	6	7	5	(d)
(e) Laxatives and purgatives	10	12	10	11	(e)
(f) Preparations acting locally on the rectum	6	8	7	9	(f)
2. Preparations acting on the cardiovascular system	42	46	49	55	2 (a)
(a) Anti-hypertensives	61	(a)
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anti-coagulants and sclerosing agents	43	51	49	55	(b)
3. Preparations acting on the nervous system	56	
(a) Addictive analgesics	3	4	4	3	3 (a)
(b) Antipyretic analgesics	49	57	60	55	(b)
(c) Specific analgesics	31	33	35	33	(c)
(d) Barbiturates (unadmixed and if principal active ingredient)	54	60	67	64	(d)
(e) Non-barbiturate hypnotics	13	12	7	(e)
(f) Tranquillisers	63	66	70	71	(f)
(g) Anti-emetic preparations	11	11	9	10	(g)
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	11	
(i) Stimulants and appetite suppressants	22	22	22	20	22 (h)
(j) Anti-depressives	30	29	32	32	(i)
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous...	27	31	32	33	(j)
	11	11	13	11	(k)

4. Preparations acting on the genito-urinary system

(a) Sex hormones	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Diuretics	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) All other preparations acting on the genito-urinary system	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Preparations acting systemically on infections	...	...	...	...	...	...	...	...	...	...	...	...	...
(a) Penicillins	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Tetracyclines	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Other antibiotics	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Sulphonamides	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Vaccines and sera	...	...	...	...	...	...	...	...	...	...	...	...	...
(f) Other anti-infective agents	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Preparations affecting metabolism and nutrition	...	...	...	...	...	...	...	...	...	...	...	...	...
(a) Insulin and other hypoglycaemics	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Erythropoietic preparations including parenteral vitamin B12	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Vitamin preparations including multivitamin preparations with mineral salts	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Corticosteroids for systemic treatment	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition	...	...	...	...	...	...	...	...	...	...	...	...	...

7. Preparations acting on the respiratory system

(a) Preparations acting locally on the upper respiratory tract	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Expectorants and cough suppressants	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Bronchodilators, relaxants and other preparations affecting the respiratory system	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) ...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Preparations affecting allergic reactions	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Preparations acting on the ear	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Topical preparations acting on the skin	...	...	...	...	...	...	...	...	...	...	...	...	...
(a) Fungicides, parasiticides and other specific anti-infective agents	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Corticosteroids	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antisepsics	...	...	...	...	...	...	...	...	...	...	...	...	...
12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)	...	...	...	...	...	...	...	...	...	...	...	...	...
13. Dressings, appliances, trusses and hosiery	...	...	...	...	...	...	...	...	...	...	...	...	...

See footnotes in appendix 3.

**Sample prescribing data: Averages of net ingredient cost per
prescription in each quarter: By therapeutic group**

Table 10

Therapeutic group	1961				1962				Pence
	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter			
All groups	74	74	74	1 (a)
1. Preparations acting on the alimentary system	(b)
(a) Antacids	43	48	46	(c)
(b) Gastro-intestinal sedatives	36	38	52	(d)
(c) Other preparations affecting digestive processes	104	97	113	(e)
(d) Tonics	28	30	29	(f)
(e) Laxatives and purgatives	30	30	34	(g)
(f) Preparations acting locally on the rectum	64	83	32	(h)
						82	79	85	(i)
2. Preparations acting on the cardiovascular system	(j)
(a) Anti-hypertensives	166	177	215	(k)
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anti-coagulants and sclerosing agents	57	59	67	(l)
						58	65	63	(m)
3. Preparations acting on the nervous system	(n)
(a) Addictive analgesics	33	37	34	(o)
(b) Antipyretic analgesics	40	40	41	(p)
(c) Specific analgesics	132	130	141	(q)
(d) Barbiturates (unadmixed and if principal active ingredient)	30	31	32	(r)
(e) Non-barbiturate hypnotics	67	66	56	(s)
(f) Tranquillisers	96	99	102	(t)
(g) Anti-emetic preparations	103	116	103	(u)
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	119	120	105	(v)
						50	50	52	(w)
(i) Stimulants and appetite suppressants	237	237	235	(x)
(j) Anti-depressives	237	237	221	(y)
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	36	33	34	(z)

4. Preparations acting on the genito-urinary system

(a) Sex hormones ...	...	...	...	...	...	...	51	60	55	57	62	56	4 (a)
(b) Diuretics ...	...	...	...	...	...	...	123	141	123	124	124	129	(b)
(c) All other preparations acting on the genito-urinary system ...	...	...	...	...	...	...	56	55	60	56	63	70	(c)

5. Preparations acting systemically on infections

(a) Penicillins ...	...	...	...	...	...	...	100	98	105	105	107	100	5 (a)
(b) Tetracyclines ...	...	...	...	...	...	...	292	301	288	284	266	255	(b)
(c) Other antibiotics ...	...	...	...	...	...	...	203	213	203	185	171	174	(c)
(d) Sulphonamides ...	...	...	...	...	...	...	44	45	42	46	47	45	(d)
(e) Vaccines and sera ...	...	...	...	...	...	...	47	66	26	29	73	74	(e)
(f) Other anti-infective agents ...	...	...	...	...	...	...	250	245	268	231	245	290	(f)

6. Preparations affecting metabolism and nutrition

(a) Insulin and other hypoglycaemics ...	...	...	...	...	...	...	327	314	301	313	340	333	6 (a)
(b) Erythropoietic preparations including parenteral vitamin B12 ...	...	...	...	...	...	...	37	39	40	38	41	42	(b)
(c) Vitamin preparations including multivitamin preparations with mineral salts ...	...	...	...	...	...	...	40	42	42	42	49	45	(c)
(d) Corticosteroids for systemic treatment ...	...	...	...	...	...	...	197	194	184	215	180	206	(d)
(e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition ...	...	...	...	...	...	...	35	36	44	59	65	65	(e)

7. Preparations acting on the respiratory system

(a) Preparations acting locally on the upper respiratory tract ...	...	...	...	...	...	...	25	23	23	23	24	23	7 (a)
(b) Expectorants and cough suppressants ...	...	...	...	...	...	...	30	32	33	33	34	33	(b)
(c) Bronchodilators, relaxants and other preparations affecting the respiratory system ...	...	...	...	...	...	...	68	70	69	75	79	78	(c)

8. Preparations affecting allergic reactions

...	...	...	...	...	...	...	45	45	43	47	49	47	8
...	...	...	...	...	...	...	47	48	52	48	50	51	9
...	...	...	...	...	...	...	34	35	35	35	38	39	10

9. Preparations acting on the ear

...	...	...	...	...	...	...	46	48	47	45	46	46	11 (a)
...	...	...	...	...	...	...	111	110	113	113	117	117	(b)
...	...	...	...	...	...	...	32	31	32	35	35	39	(c)

10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)

...	...	...	...	...	...	...	23	24	26	28	27	26	12
...	...	...	...	...	...	...	119	121	121	133	129	126	13

See footnotes in appendix 3.

Sample prescribing data: Percentages of prescriptions in each quarter: By therapeutic group

Table 11 Per cent

	Therapeutic group	1962				1961			
		3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter		
All groups	100.0	100.0	100.0	100.0
1. Preparations acting on the alimentary system	3.1	2.8	2.7	2.9
(a) Antacids	0.6	0.5	0.5	0.6
(b) Gastro-intestinal sedatives	1.1	1.0	0.9	1.1
(c) Other preparations affecting digestive processes	1.0	0.9	1.0	1.0
(d) Tonics	1.8	1.9	1.5	0.8
(e) Laxatives and purgatives	0.5	0.4	0.4	0.8
(f) Preparations acting locally on the rectum	0.4	0.4	0.5	0.5
2. Preparations acting on the cardiovascular system	1.3	1.2	1.2	1.5
(a) Anti-hypertensives	1.4	1.2
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anti-coagulants and sclerosing agents	4.0	3.6	4.0	4.0
3. Preparations acting on the nervous system	0.6	0.5	0.5	0.5
(a) Addictive analgesics	6.4	6.6	6.8	6.6
(b) Antipyretic analgesics	1.2	1.2	1.0	1.2
(c) Specific analgesics	9.4	9.0	8.9	9.5
(d) Barbiturates (unadmixed and if principal active ingredient)	1.0	0.9	0.5	10.5
(e) Non-barbiturate hypnotics	3.4	3.1	2.9	0.7
(f) Tranquillisers	0.5	0.4	0.4	0.6
(g) Anti-emetic preparations	0.5	0.4
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	1.0	0.8	0.9	0.9
(i) Stimulants and appetite suppressants	3.2	2.7	2.6	3.4
(j) Anti-depressives	0.6	0.6	0.7	0.8
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous...	1.7	1.6	1.5	1.5

4. Preparations acting on the genito-urinary system

- (a) Sex hormones
- (b) Diuretics
- (c) All other preparations acting on the genito-urinary system...

4 (a)
4 (b)
4 (c)

5. Preparations acting systemically on infections

- (a) Penicillins
- (b) Tetracyclines
- (c) Other antibiotics
- (d) Sulphonamides
- (e) Vaccines and sera
- (f) Other anti-infective agents

5 (a)
5 (b)
5 (c)
5 (d)
5 (e)
5 (f)

6. Preparations affecting metabolism and nutrition

- (a) Insulin and other hypoglycaemics
- (b) Erythropoietic preparations including parenteral vitamin B12
- (c) Vitamin preparations including multivitamin preparations with mineral salts
- (d) Corticosteroids for systemic treatment
- (e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition

6 (a)
6 (b)
6 (c)
6 (d)
6 (e)

7. Preparations acting on the respiratory system

- (a) Preparations acting locally on the upper respiratory tract
- (b) Expectorants and cough suppressants
- (c) Bronchodilators, relaxants and other preparations affecting the respiratory system

7 (a)
7 (b)
7 (c)

8. Preparations affecting allergic reactions

9. Preparations acting on the ear

10. Preparations acting on the eye (including anaesthetics and vasoconstrictors) ...

11. Topical preparations acting on the skin

- (a) Fungicides, parasiticides and other specific anti-infective agents
- (b) Corticosteroids
- (c) Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antisepsics...

11 (a)
11 (b)
11 (c)

12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)

12

13. Dressings, appliances, trusses and hosiery

13

**Sample prescribing data: Percentages of net ingredient cost
in each quarter: By therapeutic group**

Table 12

	Therapeutic group	Per cent					
		1961			1962		
		3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter
All groups	100.0	100.0	100.0	100.0
1. Preparations acting on the alimentary system
(a) Antacids
(b) Gastro-intestinal sedatives
(c) Other preparations affecting digestive processes
(d) Tonics
(e) Laxatives and purgatives
(f) Preparations acting locally on the rectum
2. Preparations acting on the cardiovascular system
(a) Anti-hypertensives
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anti-coagulants and sclerosing agents
3. Preparations acting on the nervous system
(a) Addictive analgesics
(b) Antipyretic analgesics
(c) Specific analgesics
(d) Barbiturates (unadmixed and if principal active ingredient)
(e) Non-barbiturate hypnotics
(f) Tranquillisers
(g) Anti-emetic preparations
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism
(i) Stimulants and appetite suppressants
(j) Anti-depressives
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous...

Scotland

**Sample prescribing data: Indexes of quarterly variation
in numbers of prescriptions: By therapeutic group**

Table 13

Indexes

	<i>Therapeutic group</i>	1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter
3(b)	Antipyretic analgesics	112	97	88	103
3(i)	Stimulants and appetite suppressants ...	100	117	95	89
5(a)	Penicillins	124	93	79	105
5(b)	Tetracyclines	136	90	69	108
5(d)	Sulphonamides	119	91	83	107
6(c)	Vitamin preparations including multi-vitamin preparations with mineral salts	121	99	80	100
7(a)	Preparations acting locally on the upper respiratory tract	127	96	77	101
7(b)	Expectorants and cough suppressants ...	146	76	54	123
12	Other drugs and preparations (including individually formulated preparations not classified elsewhere).	121	97	77	104

See footnotes to table 6.

Scotland

**Sample prescribing data: Indexes of quarterly variation
in net ingredient cost: By therapeutic group**

Table 14

Indexes

	<i>Therapeutic group</i>	1962			
		1st quarter	2nd quarter	3rd quarter	4th quarter
3(i)	Stimulants and appetite suppressants ...	95	120	95	90
5(a)	Penicillins	127	94	81	100
5(b)	Tetracyclines	140	94	69	105
5(d)	Sulphonamides	112	94	88	107
6(c)	Vitamin preparations including multi-vitamin preparations with mineral salts	114	95	89	102
7(a)	Preparations acting locally on the upper respiratory tract	123	97	80	101
7(b)	Expectorants and cough suppressants ...	144	75	56	124
7(c)	Bronchodilators, relaxants and other preparations affecting respiratory system	98	94	96	113
8	Preparations affecting allergic reactions ...	85	112	104	99
12	Other drugs and preparations (including individually formulated preparations not classified elsewhere)	125	104	76	96

See footnotes to table 6.

Sample prescribing data: Indexes of quarterly variation
in quantities per prescription: By therapeutic group
 $1961 = 100$

Table 15

	<i>Therapeutic group</i>	1961		1962	
		1st quarter	4th quarter	1st quarter	4th quarter
All groups	96	103
1. Preparations acting on the alimentary system					
(a) Antacids	97	103
(b) Gastro-intestinal sedatives	95	102
(c) Other preparations affecting digestive processes	94	101
(d) Tonics	97	103
(e) Laxatives and purgatives	94	100
(f) Preparations acting locally on the rectum	94	103
				102	99
					109
2. Preparations acting on the cardiovascular system					
(a) Anti-hypertensives	95	103
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	102	104
				102	100
					106
3. Preparations acting on the nervous system					
(a) Addictive analgesics	94	106
(b) Antipyretic analgesics	88	105
(c) Specific analgesics	96	103
(d) Barbiturates (unadmixed and if principal active ingredient)	94	104
(e) Non-barbiturate hypnotics	92	104
(f) Tranquillisers	95	105
(g) Anti-emetic preparations	94	106
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	96	101
(i) Stimulants and appetite suppressants	96	103
(j) Anti-depressives	96	104
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	92	107
				97	103

4.	Preparations acting on the genito-urinary system	103
(a)	Sex hormones	108	
(b)	Diuretics	100	
(c)	All other preparations acting on the genito-urinary system	100	
5.	Preparations acting systemically on infections	101	
(a)	Penicillins	107		
(b)	Tetracyclines	...	...	...	...	...	...	104
(c)	Other antibiotics	...	...	...	...	...	...	104
(d)	Sulphonamides	...	...	...	...	...	...	104
(e)	Vaccines and sera	...	...	...	...	...	...	99
(f)	Other anti-infective agents	...	...	...	...	...	...	N.A.
6.	Preparations affecting metabolism and nutrition	...	...	...	...	...	...	104
(a)	Insulin and other hypoglycaemics	...	...	...	...	...	102	
(b)	Erythropoietic preparations including parenteral vitamin B12	...	...	...	...	...	108	
(c)	Vitamin preparations including multivitamin preparations with mineral salts	...	...	...	...	...	103	
(d)	Corticosteroids for systemic treatment	...	...	...	...	...	103	
(e)	Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition	...	...	...	...	...	104	
7.	Preparations acting on the respiratory system	...	...	...	...	...	...	109
(a)	Preparations acting locally on the upper respiratory tract	...	...	...	...	...	102	
(b)	Expectorants and cough suppressants	...	...	...	...	...	107	
(c)	Broncodilators, relaxants and other preparations affecting the respiratory system	...	...	...	...	...	107	
8.	Preparations affecting allergic reactions	...	...	...	...	...	...	102
9.	Preparations acting on the ear	...	...	...	...	...	...	105
10.	Preparations acting on the eye (including anaesthetics and vasoconstrictors)	...	...	...	...	...	...	105
11.	Topical preparations acting on the skin	...	...	...	...	...	...	106
(a)	Fungicides, parasiticides and other specific anti-infective agents	...	...	...	...	...	...	101
(b)	Corticosteroids	...	...	...	...	...	...	105
(c)	Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics	...	...	...	...	...	...	108
12.	Other drugs and preparations	...	...	...	...	...	...	106
13.	Dressings, appliances, trusses and hosiery	...	...	...	...	...	...	106

See footnotes in appendix 3.

Based on 1200 drugs. Individually formulated preparations usually included in group 12 have necessarily been excluded from the drugs used for this table. Group 5(e) (Vaccines and sera) has been excluded because of the extreme seasonal prescribing of dominant drugs in this group. The series of figures for group 3(e) (Non-barbiturate hypnotics) was affected by the withdrawal of thalidomide in December 1961.

**Sample prescribing data: Indexes of quarterly variation
in price: By therapeutic group
1961 = 100**

Table 16

		Therapeutic group			
		1st quarter	4th quarter	1st quarter	4th quarter
All groups
1. Preparations acting on the alimentary system					
(a) Antacids
(b) Gastro-intestinal sedatives
(c) Other preparations affecting digestive processes
(d) Tonics
(e) Laxatives and purgatives
(f) Preparations acting locally on the rectum
All groups
2. Preparations acting on the cardiovascular system					
(a) Anti-hypertensives
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents
All groups
3. Preparations acting on the nervous system					
(a) Addictive analgesics
(b) Antipyretic analgesics
(c) Specific analgesics
(d) Barbiturates (unadmixed and if principal active ingredient)
(e) Non-barbiturate hypnotics
(f) Tranquillisers
(g) Anti-emetic preparations
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism
(i) Stimulants and appetite suppressants
(j) Anti-depressives
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous

4.	Preparations acting on the genito-urinary system	98	98
(a)	Sex hormones	90	90
(b)	Diuretics	98	98
(c)	All other preparations acting on the genito-urinary system	100	100
5.	Preparations acting systemically on infections	103	97
(a)	Penicillins	99	95
(b)	Tetracyclines	96	85
(c)	Other antibiotics	97	87
(d)	Sulphonamides	99	94
(e)	Vaccines and sera	97	N.A.
(f)	Other anti-infective agents...	N.A.	99
6.	Preparations affecting metabolism and nutrition	103	96
(a)	Insulin and other hypoglycaemics	107	97
(b)	Erythropoietic preparations including parenteral vitamin B12	100	99
(c)	Vitamin preparations including multivitamin preparations with mineral salts	101	99
(d)	Corticosteroids for systemic treatment	101	99
(e)	Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition	102	97
7.	Preparations acting on the respiratory system	100	99
(a)	Preparations acting locally on the upper respiratory tract	101	100
(b)	Expectorants and cough suppressants	102	99
(c)	Broncodilators, relaxants and other preparations affecting the respiratory system ...	100	101
8.	Preparations affecting allergic reactions	101	98
9.	Preparations acting on the ear	100	99
10.	Preparations acting on the eye (including anaesthetics and vasoconstrictors)	102	99
11.	Topical preparations acting on the skin	103	99
(a)	Fungicides, parasiticides and other specific anti-infective agents	105	96
(b)	Corticosteroids	101	99
(c)	Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics	100	101
12.	Other drugs and preparations	100	99
13.	Dressings, appliances, trusses and hosiery	100	100

See footnotes to table 15.

Sample prescribing data: Indexes of quarterly variations
in numbers of prescriptions: By therapeutic group
1961 = 100

Table 17

		Therapeutic group			
		1961 1st quarter	1961 4th quarter	1962 1st quarter	1962 4th quarter
All groups	98
1. Preparations acting on the alimentary system					
(a) Antacids	109
(b) Gastro-intestinal sedatives	98
(c) Other preparations affecting digestive processes	98
(d) Tonics	98
(e) Laxatives and purgatives	98
(f) Preparations acting locally on the rectum	98
2. Preparations acting on the cardiovascular system					
(a) Anti-hypertensives	98
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	98
3. Preparations acting on the nervous system					
(a) Addictive analgesics	98
(b) Antipyretic analgesics	98
(c) Specific analgesics	98
(d) Barbiturates (unadmixed and if principal active ingredient)	98
(e) Non-barbiturate hypnotics	98
(f) Tranquillisers	98
(g) Anti-emetic preparations	98
(h) Anticonvulsants and other preparations for treating motion sickness and Parkinsonism	98
(i) Stimulants and appetite suppressants	98
(j) Anti-depressives	98
(k) Local anaesthetics, analgesics, counter irritants and miscellaneous	98

4. Preparations acting on the genito-urinary system													
(a) Sex hormones	...	...	...	...	...	...	...	...	...	...	94	94	94
(b) Diuretics	...	...	...	...	...	...	...	...	...	...	87	83	87
(c) All other preparations acting on the genito-urinary system	...	...	...	...	...	...	...	...	...	...	88	97	88
5. Preparations acting systemically on infections													
(a) Penicillins	...	...	...	...	...	...	...	...	...	...	109	89	94
(b) Tetracyclines	...	...	...	...	...	...	...	...	...	...	128	94	94
(c) Other antibiotics	...	...	...	...	...	...	...	...	...	...	161	138	138
(d) Sulphonamides	...	...	...	...	...	...	...	...	...	...	135	99	109
(e) Vaccines and sera	...	...	...	...	...	...	...	...	...	...	128	98	112
(f) Other anti-infective agents...	...	...	...	...	...	...	...	...	...	...	95	111	95
											118	96	97
6. Preparations affecting metabolism and nutrition													
(a) Insulin and other hypoglycaemics	...	...	...	...	...	...	...	...	...	...	123	104	105
(b) Erythropoietic preparations including parenteral vitamin B12	...	...	...	...	...	...	...	...	...	...	133	115	104
(c) Vitamin preparations including multivitamin preparations with mineral salts	...	...	...	...	...	...	...	...	...	...	135	99	94
(d) Corticosteroids for systemic treatment	...	...	...	...	...	...	...	...	...	...	128	98	112
(e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition	...	...	...	...	...	...	...	...	...	...	95	111	115
											118	96	97
7. Preparations acting on the respiratory system													
(a) Preparations acting locally on the upper respiratory tract	...	...	...	...	...	...	...	...	...	...	104	98	106
(b) Expectorants and cough suppressants	...	...	...	...	...	...	...	...	...	...	161	138	138
(c) Broncodilators, relaxants and other preparations affecting the respiratory system	...	...	...	...	...	...	...	...	...	...	135	99	109
8. Preparations affecting allergic reactions													
9. Preparations acting on the ear	...	...	...	...	...	...	...	...	...	...	124	91	107
10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)	...	...	...	...	...	...	...	...	...	...	115	86	103
11. Topical preparations acting on the skin													
(a) Fungicides, parasiticides and other specific anti-infective agents	...	...	...	...	...	...	...	...	...	...	103	92	93
(b) Corticosteroids	...	...	...	...	...	...	...	...	...	...	104	95	104
(c) Other preparations: Sedatives, antipruritics, keratolytics and antiseptics including surgical antiseptics	...	...	...	...	...	...	...	...	...	...	118	90	91
12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)	...	...	...	...	...	...	...	...	...	...	128	100	98
13. Dressings, appliances, trusses and hosiery	...	...	...	...	...	...	...	...	...	...	126	92	96
											...	...	88

See footnotes in appendix 3.

The series of figures for group 3(e) (Non-barbiturate hypnotics) was affected by the withdrawal of thalidomide in December 1961.

England and Wales

Sample prescribing data: Numbers of drugs and prescriptions, totals of net ingredient cost, and averages of net ingredient cost per prescription, for proprietary drugs: By year of introduction

Table 18

Year of introduction	Number of drugs		Number of prescriptions		Total net ingredient cost		Average net ingredient cost per prescription	
	Number		Millions		£ million		Pence	
	1961	1962	1961	1962	1961	1962	1961	1962
All years ...	4250	4120	123.34	123.66	43.89	47.65	85	93
Before 1956 ...	2870	2570	78.72	73.64	21.57	21.21	66	69
1956 ...	230	220	9.41	8.78	3.41	3.24	87	89
1957 ...	230	220	6.36	6.29	2.99	2.97	113	113
1958 ...	270	270	10.27	9.07	4.86	4.41	114	117
1959 ...	230	230	8.80	9.04	5.39	5.75	147	153
1960 ...	250	250	8.42	10.83	4.92	6.68	140	148
1961 ...	160	210	1.36	4.85	0.74	2.73	131	135
1962 ...	—	140	—	1.15	—	0.66	—	138

See footnotes in appendix 3.

The table includes only drugs prescribed by proprietary name. Drugs prescribed by non-proprietary name but available only in proprietary form are excluded.

Year of introduction shown is that when the drug was first introduced. All strengths of the drug are shown therefore under the same year of introduction even though some of them may have been introduced more recently.

Scotland

Sample prescribing data for 1962: Numbers of drugs and prescriptions, totals of net ingredient cost, and averages of net ingredient cost per prescription, for proprietary drugs: By year of introduction

Table 19

Year of introduction	Number of drugs		Number of prescriptions		Total net ingredient cost		Average net ingredient cost per prescription	
	Number	Thousands	Thousands	£ thousand	Pence			
All years ...	2,590	13,749	—	4,956	—	87		
Before 1956 ...	1,490	8,496	—	2,453	—	69		
1956 ...	150	979	—	358	—	88		
1957 ...	160	654	—	265	—	97		
1958 ...	200	823	—	384	—	112		
1959 ...	170	1,029	—	556	—	130		
1960 ...	180	1,025	—	525	—	123		
1961 ...	160	620	—	342	—	133		
1962 ...	90	123	—	73	—	141		

See footnotes to table 18.

England and Wales

Prescribing averages for the years 1959-1962: By region

Table 20

Region	Average net ingredient cost per prescription				Average frequency per person (1)				Average net ingredient cost per person (2)			
	Pence				Number				Pence			
	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962
Wales	55.4	60.3	71.0	79.5	5.98	6.12	5.64	5.29	331	369	401	420
Northern	56.4	60.9	70.4	78.0	4.94	5.11	4.60	4.42	279	311	324	345
Southern	56.3	61.4	70.4	77.7	4.51	4.56	4.33	4.08	254	280	305	317
South Western	55.8	60.9	69.3	76.9	4.86	4.93	4.68	4.45	271	300	325	343
Eastern	53.4	57.7	67.0	75.2	4.67	4.67	4.37	4.12	249	270	293	310
North Midland	52.1	56.2	63.8	71.2	4.61	4.69	4.36	4.17	240	263	278	297
North Western	51.7	55.7	63.4	69.1	5.64	5.75	5.26	4.96	291	320	333	343
London and South Eastern	51.3	54.7	62.9	69.5	4.87	4.88	4.55	4.30	250	267	286	299
East and West Ridings	49.9	54.1	63.0	69.1	5.31	5.33	4.91	4.66	265	288	309	322
Midland	48.5	52.6	59.8	67.0	4.78	4.83	4.45	4.22	232	254	266	283

(1) Total number of prescriptions dispensed in the area divided by the total number of persons on doctors' prescribing lists for the area.

(2) Total net ingredient cost of prescriptions dispensed in the area divided by total number of persons on doctors' prescribing lists for the area.

England and Wales

Ranks of prescribing averages for the years 1959-1962: By region

Table 21
Ranks

Region	Average net ingredient cost per prescription				Average frequency per person				Average net ingredient cost per person			
	1959	1960	1961	1962	1959	1960	1961	1962	1959	1960	1961	1962
Wales	4	4	1	1	1	1	1	1	1	1	1	1
Northern	2	4	5	5	3	4	4	2
Southern	3	10	10	10	6	6	6	6
South Western	2	4	5	4	4	4	3	4
Eastern	4	6	8	8	7	7	7	7
North Midland	5	5	8	9	9	9	9	9
North Western	6	6	9	8	2	2	2	3
London and South Eastern	7	7	9	2	6	7	8	8
East and West Ridings	8	8	7	3	3	5	5	5
Midland	9	9	8	7	7	10	10	10

See footnotes to table 20.

England and Wales

Actual and sample prescribing data for 1961: By region

Table 22

Region	Actual prescribing data		Sample prescribing data
	Number of prescriptions dispensed	Average net ingredient cost per prescription	
	Millions	Pence	
All regions	205·0	65·0	64·9
Wales	13·9	71·0	71·8
Northern	13·9	70·4	71·2
Southern	10·8	70·4	68·2
South Western	14·2	69·3	68·2
Eastern	17·5	67·0	65·7
N. Midland	14·4	63·8	65·4
N. Western	33·7	63·4	64·1
London and South Eastern	47·0	62·9	62·6
East and West Ridings	19·6	63·0	61·9
Midland	20·1	59·8	60·2

See footnotes in appendix 3.

Table 23
Sample prescribing data for 1961: Percentages of prescriptions in each region: By therapeutic group

		Per cent							
		Therapeutic group							
		All regions	Wales	Northem	Southern	S. Western	E. Western	N. Midland	Midland
		100	100	100	100	100	100	100	100
1.	Preparations acting on the alimentary system								
(a)	Antacids and other preparations affecting digestive processes	5.2	5.0	5.2	4.9	5.1	5.6	5.0	5.4
(b)	Tonics	1.7	1.8	1.6	1.6	1.6	1.7	1.9	1.6
(c)	Laxatives and purgatives	2.1	2.3	2.0	2.1	1.9	1.7	2.3	2.4
(d)	Preparations acting locally on the rectum	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
2.	Preparations acting on the cardiovascular system								
(a)	Anti-hypertensives	1.2	1.4	1.5	1.3	1.0	1.3	1.1	1.0
(b)	Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	3.6	3.0	3.9	3.5	3.5	3.4	3.6	3.5
3.	Preparations acting on the nervous system								
(a)	Addictive, antipyretic and specific analgesics	9.2	8.6	9.2	8.7	8.1	9.0	9.3	9.8
(b)	Sedatives, hypnotics, anticonvulsants, tranquillisers and preparations for treating motion sickness and Parkinsonism	13.5	12.1	12.7	14.9	15.0	14.1	13.6	13.7
(c)	Stimulants and appetite suppressants	2.9	2.8	3.4	2.8	2.6	2.8	2.9	3.0
(d)	Anti-depressives	0.7	0.7	0.9	0.7	0.8	0.7	0.7	0.7
(e)	Local anaesthetics, analgesics, counter irritants and miscellaneous	2.2	2.2	2.3	2.0	1.8	2.0	2.3	2.3
4.	Preparations acting on the genito-urinary system								
(a)	Sex hormones	1.1	1.0	0.9	1.2	1.2	1.3	1.0	1.2
(b)	Diuretics	1.8	1.5	1.6	1.8	2.3	1.9	1.8	1.6
(c)	All other preparations acting on the genito-urinary system	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.0

See footnotes in appendix 3.

The therapeutic groupings shown above are not sub-divided to the same extent as those given in tables 1-12. This table is not consistent with tables 1-14 in the allocation of individual preparations to therapeutic groups since tables 1-14 were based on a revised therapeutic classification involving the transfer of some drugs to other groups.

Table 24
Sample prescribing data for 1961: Averages of net ingredient cost per prescription in each region: By therapeutic group

<i>Therapeutic group</i>		Pence								
All regions	Wales	Northem	Southern	S. Western	E. Western	N. Middle	London S.E.	N.E. and N.W.	Middleand	
All groups ...	... ...	71	68	68	66	65	64	63	62	60
1. Preparations acting on the alimentary system										
(a) Antacids and other preparations affecting digestive processes	42	51	47	40	43	40	38	44	39	43
(b) Tonics	23	28	24	20	21	24	21	24	24	22
(c) Laxatives and purgatives	30	29	26	30	33	33	26	27	34	27
(d) Preparations acting locally on the rectum	72	78	75	76	78	80	79	71	66	72
2. Preparations acting on the cardiovascular system										
(a) Anti-hypertensives	172	189	170	191	182	168	195	148	160	182
(b) Other preparations: Cardiac drugs, vasodilators, vasoconstrictors, anticoagulants and sclerosing agents	52	52	60	55	50	53	51	51	53	52
3. Preparations acting on the nervous system										
(a) Addictive, antipyretic and specific analgesics	47	46	46	53	51	48	45	46	49	48
(b) Sedatives, hypnotics, anticonvulsants, tranquillisers and preparations for treating motion sickness and Parkinsonism	48	50	55	51	50	46	46	50	46	49
(c) Stimulants and appetite suppressants	50	52	51	56	54	52	49	49	50	49
(d) Anti-depressives	227	221	258	236	241	222	236	214	230	216
(e) Local anaesthetics, analgesics, counter irritants and miscellaneous	32	37	38	33	33	33	32	32	31	33
4. Preparations acting on the genito-urinary system										
(a) Sex hormones	74	66	83	80	89	79	80	65	75	67
(b) Diuretics	129	161	146	130	127	149	122	115	131	116
(c) All other preparations acting on the genito-urinary system	44	43	40	48	45	48	42	44	49	43

Preparations acting systemically on infections

- (a) Antibiotics
- (b) Sulphonamides
- (c) Vaccines and sera
- (d) Other anti-infective agents

6. Preparations affecting metabolism and nutrition

- (a) Insulin and other hypoglycaemics
- (b) Erythropoietic preparations including parenteral vitamin B12
- (c) Vitamin preparations including multivitamin preparations with mineral salts
- (d) Corticosteroids for systemic treatment
- (e) Thyroid, anti-thyroid and other preparations affecting metabolism and nutrition

7. Preparations acting on the respiratory system

- (a) Preparations acting locally on the upper respiratory tract
- (b) Other preparations: Bronchodilators, bronchorelaxants, expectorants, cough suppressants and respiratory stimulants
- 8. Preparations affecting allergic reactions
- 9. Preparations acting on the ear
- 10. Preparations acting on the eye (including anaesthetics and vasoconstrictors)
- 11. Topical preparations acting on the skin
 - (a) Fungicides, parasiticides and other specific anti-infective agents
 - (b) Corticosteroids
 - (c) Other preparations: Sedatives, antipruritics, keratolytics and antisepsics including surgical antisepsics
- 12. Other drugs and preparations (including individually formulated preparations not classified elsewhere)
- 13. Dressings, appliances, trusses and hosiery

England and Wales

**Sample prescribing data for 1961: Unadjusted and
standardised regional averages of net ingredient cost per prescription**

Table 25

Pence

<i>Region</i>	<i>Unadjusted</i>	<i>Standardised (1)</i>	
		<i>For the percentage of prescriptions per therapeutic group</i>	<i>For the average net ingredient cost per prescription per therapeutic group</i>
Wales 	72	71	66
Northern 	71	68	68
Southern 	68	67	66
South Western 	68	68	66
Eastern 	66	65	65
North Midland 	65	63	67
North Western 	64	65	64
London and South Eastern	63	63	64
East and West Ridings ...	62	63	64
Midland 	60	60	65

See footnotes in appendix 3.

(1) Standardised on the relevant sample distribution for England and Wales.

Sample prescribing data for 1961: Percentages of prescriptions and averages of net ingredient cost per prescription in four regions: By six therapeutic groups and their sub-groups

Table 26

		<i>Therapeutic group and sub-group</i>				<i>Percentage of total number of prescriptions in group</i>				<i>Average net ingredient cost per prescription: Pence</i>			
		<i>Wales</i>	<i>Northern</i>	<i>East and West Ridings</i>	<i>Midland</i>	<i>Wales</i>	<i>Northern</i>	<i>East and West Ridings</i>	<i>Midland</i>	<i>Wales</i>	<i>Northern</i>	<i>East and West Ridings</i>	<i>Midland</i>
Group 3(b)													
All sub-groups	100	100	100	100	50	55	49	46
Barbiturates	54	51	57	54	26	25	22	22
Non-barbiturate hypnotics	12	12	11	12	39	37	26	25
Tranquillisers	24	25	22	23	90	96	96	89
Others	10	12	10	11	99	107	104	98
Group 4(b)													
Diuretics	100	100	100	100	100	100	146	123
Group 5(a)													
All sub-groups	100	100	100	100	100	200	188	175
Penicillins	48	56	58	60	119	123	109	108
Tetracyclines	37	30	28	29	296	306	302	290
Chloramphenicol	7	8	7	5	222	216	231	228
Others	8	5	7	6	231	187	165	195
Group 6(b)													
All sub-groups	100	100	100	100	63	45	48	36
Iron and other erythropoietic preparations	83	90	86	91	49	39	37	30
Preparations of vitamin B ₁₂	17	10	14	9	132	96	110	104
Group 7(b)													
All sub-groups	100	100	100	100	39	37	31	26
Expectorants and cough suppressants	80	78	82	82	31	26	24	19
Bronchodilators and relaxants	19	22	17	18	71	74	63	56
Others	1	—	1	—	145	92	134	91
Group 11(b)													
Corticosteroids	100	100	100	100	100	100	107	103

See footnotes to table 23.

England and Wales

Sample prescribing data for 1961: Percentages of prescriptions and averages of net ingredient cost per prescription for proprietary drugs: By six therapeutic groups and their more important sub-groups

Table 27

		Therapeutic group and sub-group				Percentage of total number of prescriptions in each group and sub-group				Average net ingredient cost per prescription: Pence			
		Wales	Northern	East and West Ridings	Midland	Wales	Northern	East and West Ridings	Midland	Wales	Northern	East and West Ridings	Midland
Group 3(b)													
All sub-groups	79	80	75	72	61	67	61	59
Barbiturates	73	73	72	67	33	34	31	29
Non-barbiturate hypnotics	52	54	36	34	68	62	59	61
Tranquillisers	96	97	94	94	92	98	98	91
Group 4(b)													
Diuretics	81	83	71	72	185	167	143	149
Group 5(a)													
All sub-groups	79	80	75	67	220	204	192	189
Penicillins	63	67	64	57	132	129	117	115
Tetracyclines	98	99	93	85	295	305	300	285
Group 6(b)													
All sub-groups	84	82	74	66	72	52	60	48
Iron and other erythropoietic preparations	81	80	70	64	58	46	48	40
Preparation of vitamin B.12	99	100	100	98	132	96	110	105
Group 7(b)													
All sub-groups	55	47	41	55	57	52	49	49
Expectorants and cough suppressants	47	41	32	45	41	41	41	38
Broncholidators and relaxants	90	82	78	77	78	88	77	70
Group 11(b)													
Corticosteroids	87	78	64	66	143	126	120	116

See footnotes to table 23.

Only drugs prescribed by proprietary name are included. Drugs prescribed by non-proprietary name but available only in proprietary form are excluded.

England and Wales

Prescribing averages for sample doctors: By age of doctor and practice category

Table 28

Practice category	Age					
	All ages	Under 36	36-	46-	56-	66 and over
<i>Average cost per person: (1) Pence</i>						
Single-handed Partnership	32.5 32.2	39.3 N.A.	34.3 N.A.	32.2 N.A.	29.1 N.A.	27.3 N.A.
<i>Average cost per prescription: (1) Pence</i>						
Single-handed Partnership	78.8 79.7	85.1 79.9	80.8 82.6	79.3 79.4	73.5 74.5	71.8 70.1
<i>Average prescription frequency: Number</i>						
Single-handed Partnership	0.41 0.40	0.46 N.A.	0.43 N.A.	0.41 N.A.	0.40 N.A.	0.38 N.A.

Averages are based on prescribing for one month during the period September 1958 to July 1959, for the whole practice irrespective of whether or not this covered more than one executive council area.

(1) Costs refer to total payments to chemists and differ from those analysed in tables which refer to net ingredient cost only.

England and Wales

Prescribing averages for single-handed sample doctors: By age of doctor and executive council area cost category

Table 29

Executive council category	Age					
	All ages	Under 36	36-	46-	56	66 and over
<i>Average cost per person: Pence</i>						
High cost	38.1	46.4	40.8	37.0	33.3	34.5
Medium cost	31.3	36.3	31.7	30.8	29.7	26.6
Low cost	25.5	33.3	26.6	25.1	23.8	20.3
<i>Average cost per prescription: Pence</i>						
High cost	82.0	90.9	86.4	81.2	74.4	74.3
Medium cost	77.8	84.3	77.6	78.8	74.3	73.4
Low cost	73.2	76.5	73.2	75.2	71.1	66.8
<i>Average prescription frequency: Number</i>						
High cost	0.46	0.51	0.47	0.46	0.45	0.46
Medium cost	0.40	0.43	0.41	0.39	0.40	0.36
Low cost	0.35	0.44	0.36	0.33	0.34	0.30

See footnotes to table 28.



England and Wales

Prescribing averages for 852 sample single-handed
doctors: By size of total N.H.S. medical list

Table 30

List size	Average cost per person	Average cost per prescription	Average prescription frequency		
			Pence	Pence	Number
All list sizes ...	32·6	79·0			0·41
Less than 1,000	35·7	80·0			0·45
1,000 -	33·6	76·2			0·44
1,500 -	33·8	79·8			0·42
2,000 -	32·2	78·7			0·41
2,500 -	32·4	80·0			0·41
3,000 -	32·7	79·2			0·41
3,500 and over	30·4	77·3			0·39

See footnotes to table 28.

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